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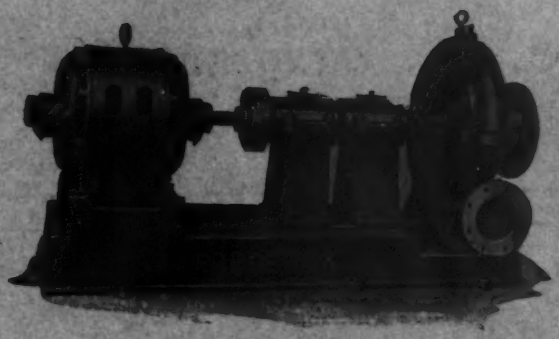
PAPER TRADE JOURNAL

PAPER THE MAGAZINE
Is Combined with Paper Trade Journal

Vol. LXXXI. No. 15 OCTOBER 8, 1925 Per annum $4.00 Per Copy, 10 cents



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EXECUTIVE AND EDITORIAL OFFICES: 10 EAST 39th STREET, NEW YORK CITY

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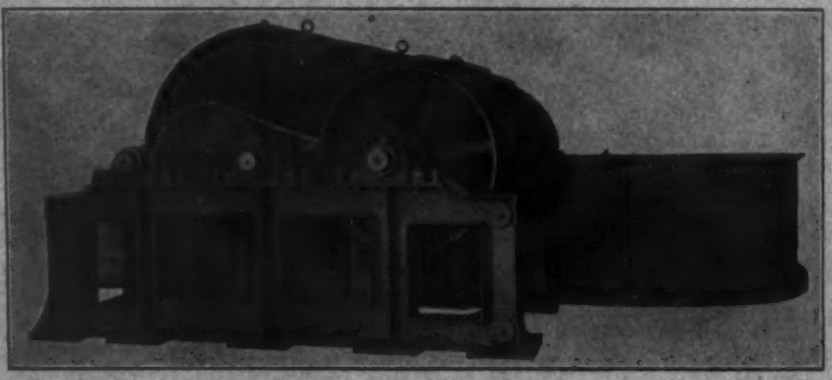

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PAPER TRADE JOURNAL
ESTABLISHED 1872

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY AND THE PIONEER PUBLICATION IN ITS FIELD

FIFTY-THIRD YEAR

Published Every Thursday by the
LOCKWOOD TRADE JOURNAL CO., Inc.

LESLIE R. PALMER, President — GEO. S. MACDONALD, Vice-President & Treas. — F. K. HOPPIE, Secretary

Executive and Editorial Offices: 10 East 39th Street, New York
Boston Office: Room 37, 127 Federal St., Boston, Mass.
Chicago Office: Room 14, Suite 410, 123 West Madison St.

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ESTABLISHED IN 1872

PAPER TRADE JOURNAL

With Which Is Combined

Vol. LXXX, No. 15 — Thursday, October 8, 1925

The Magazine of the Paper Industry

Paper Production For August Shows Increase

According to Figures Furnished by Identical Mills to the American Paper and Pulp Association and Co-operating Organizations, Production in August Showed a Gain of 2 Per Cent as Compared With July—During Same Period Domestic Wood Pulp Production Showed Decrease of 6 Per Cent.

The August production of paper in the United States as reported by identical mills to the American Paper and Pulp Association and cooperating organizations, showed an increase of 2 per cent as compared with July's production following a one per cent decrease in July over June, according to the Association's Monthly Statistical Summary of Pulp and Paper Industry. All grades showed an increase in production as compared with July, with two exceptions.

The summary is prepared by the American Paper and Pulp Association as the central organization of the paper industry, in cooperation with the Binders Board Manufacturers Association, Converting Paper Mills Association, Cover Paper Association, News Print Service Bureau, Wrapping Paper Manufacturers Service Bureau and Writing Paper Manufacturers Association.

The figures for August for same mills as reported in July are:

Grade	Number of Mills	Production Net Tons	Shipments Net Tons	Stocks on Hand End of Month —Net Tons
Newsprint	66	120,902	119,752	35,077
Book	62	85,879	84,073	47,393
Paperboard	101	121,487	126,770	34,659
Wrapping	77	52,219	55,323	56,385
Bag	24	9,690	9,701	8,143
Fine	80	29,119	27,968	40,916
Tissue	44	12,368	13,102	13,420
Hanging	8	3,386	3,933	1,916
Felts	18	13,387	13,654	2,660
Other Grades	64	18,320	17,962	14,588
Total—all grades	—	466,757	472,238	255,157

During the same period, domestic wood pulp production decreased 6 per cent, this decrease being distributed over all grades, with three exceptions. The August totals (mills identical with those reporting in July) as reported by the American Paper and Pulp Association, are as follows:

Grade	Number of Mills	Production Net Tons	Used Net Tons	Shipments Net Tons	Stocks on Hand end of Month Net Tons
Groundwood Pulp	101	64,866	81,576	2,488	160,349
Sulphite News Grade	39	35,180	33,541	2,334	8,194
Sulphite Bleached	21	22,719	17,657	4,148	3,351
Sulphite Easy Bl.	6	3,060	2,703	526	1,629
Sulphite Mitscherlich	6	6,688	5,457	989	1,593
Sulphate Pulp	10	13,895	12,601	1,332	1,534
Soda Pulp	11	16,317	12,509	3,407	3,290
Other than Wood Pulp	2	46	.....	....	78
Total—all grades		162,771	166,035	15,224	180,018

Defiance Co. Takes Over Hammermill M. G. Line

The purchase of equipment and good will for the entire line of machine glazed papers formerly manufactured by the Hammermill Paper Company, Erie, Pa., has just been announced by T. M. Uptegraff, general manager of the Defiance Paper Company, of Niagara Falls, N. Y.

This announcement following the one made by the Defiance interests in July of the purchase of the plant formerly operated by the Pettebone-Cataract Paper Company, indicates a broadening of scope and the healthy growth of the Niagara concern in the industry.

The plant acquired contains two machines, one a straight Fourdrinier, trimming 80-inches, which will produce ground wood and sulphite specialties—the other, an 80-inch Yankee Fourdrinier which will be operated exclusively on the Seneca line of white and tinted M. G. papers, formerly made by The Hammermill Paper Company.

The continuous and phenomenal growth of the Hammermill Line of fine papers made the future production of the M. G. Seneca Line a serious problem for the Hammermill Company, and after trying several expedients, arrangements were made for the Defiance Paper Company to continue the production of the Seneca Line, using the same equipment which had been operated in the Hammermill plant. This equipment is now being dismantled and forwarded to Niagara Falls where it will be promptly installed so that there will be the least possible interruption in production.

Mr. Uptegraff stated that they will be ready to fill orders on the M. G. Seneca Line by November 15 or 20, and that W. H. Howe, who was selling-agent for the Hammermill M. G. Line since its development, has joined the sales organization of the Defiance Paper Company as has H. H. Turner, who also comes from the Hammermill sales department.

With this additional equipment and experienced organization, the Defiance Company expects to add to the Seneca Line and broaden out into the field of high-grade machine glazed wrappings and machine finish specialties.

Bond Holders Buy Wolverine Paper Co.

KALAMAZOO, Mich., September 21, 1925.—Bond holders of the defunct Wolverine Paper Company of Otsego have purchased the assets of the concern for $60,000, according to Robert L. Campbell, attorney for Charles E. Nelson, trustee in bankruptcy. The sale is to be confirmed by the referee in bankruptcy.

The assets listed and appraised value are: Real estate, $47,500; machinery and fixtures, $87,500; inventory, $29,958; total, $164,958. Mr. Campbell stated that on his advice the bills and accounts receivable, amounting to $58,000, will be handled by the trustees.

The mill is still being operated under the management of C. E. Nelson, president of the MacSimBar Paper Company. Just how long it will continue to run is unknown. It has been estimated by certain persons closely connected with the situation that it will require at least $200,000 expenditure to put the plant in condition.

Philadelphia Trade Continues Fairly Active

Demand for Fine Papers Well Maintained—Dealers Optimistic Regarding Outlook for Coarse Papers—Distributors of News Print Anticipate Advanced Prices Due to European Situation and Short Stocks—Postal Reductions To Be Discussed at Chicago Convention.

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., October 5, 1925.—Though the paper markets in this territory continue to show the broadening of activities in the industrial life of the Quaker City and its surroundings, there is not the volume of orders that might be expected with the advent of Fall. Closing days of the month, while bringing a fair proportion of business, in consideration of the duller trend of early September, lacked that brisker buying customary at this season in preparation for the resumption of operations in all lines of industry on autumn schedule. Whatever purchases were made were still confined to the hand to mouth type and in a few cases of larger volume when attractive prices were quoted.

Fine Papers Moving in Fair Volume

Fine papers are holding to the records of the previous week with a fairly well maintained market for small orders of a broader scope. In the early part of the month there was very little demand among the smaller printing establishments with most of the buying confined to the large printing and publishing concerns. Now that these wants have been supplied and the larger firms are well stocked, the trade is giving its attention to the requirements of the smaller commercial printers, who have had but little demand for papers throughout the summer months because of an extremely dull season. The prices of fine papers are holding firmly except in the rare instances of tonnage orders when the customary concessions are allowed.

Coarse Papers Holding to Firmer Demand

Though there is much that could be desired for the Fall paper markets in the matter of volume of orders the dealers nevertheless are much encouraged in the outlook for this branch of the paper industry from a summary of the present conditions. The growing scarcity of many lines of these grades and the failure of the mills to provide stocks for immediate shipments have had a tendency to correct some of the recent defects of the market. Prices are holding more firmly to the advance made a month ago on Krafts and numerous other lines that for many months showed a tendency to softening influences of prolific mill offerings and overstocked warehouses among the distributors. Grey bogus has been advanced ten cents per hundred pounds, according to mill announcements sent out last week.

Firming of American Paper Products Predicted

In the recent advances announced by the European manufacturers, the local paper men foresee beneficial effects on the American products and are predicting a steady demand for our own makes of the grades that are affected by the rise in importations. The Philadelphia distributors have been advised that there will be an advance of $1.50 per ton on news print manufactured in Germany with another higher quotation on the Swedish and other Scandinavian Krafts and grease proof papers of ¼ cent per pound. According to the opinion of the Philadelphia distributors this will mean more buying from the home mills and a gradually lessening of importations, which will have a steadying effect upon the American products in this class and grades of papers. It is forecast that there must of necessity be an advance in prices because the American mills already are behind on deliveries due to short stocks and with the European papers rising to the quotations of the home markets there naturally will be eliminated the stronger competition of the lower priced foreign grades, evolving in greater demand and firmer prices.

Stock Market Sluggish

There has been a tendency in the paper stock market to drift along in sluggish channels with but very little stocks coming into the warehouses and accordingly not much of any grades moving out. With these conditions of equality in accumulation and demand the prices are held stationary and unless the mill orders increase there is not likely to be any revision to the higher levels or to lower quotations. Both rag and paper stocks dealers are pretty well cleaned up on all the popular grades with but a few of the high priced materials stocked in the warehouses.

George W. Ward to Speak at Convention

The question of postal reductions and its relation to the paper industry will be discussed at the coming Chicago Convention during the week by George W. Ward, head of the D. L. Ward Company, 28 S. 6th. street, who is Chairman of the National Association on the Postal Committee and a member of the Board of Managers of the National Council of Business Mail Users, who now are engaged in the work of campaigning for the repeal of the present heavy postal charge on mail matter recently effective. Mr. Ward has been active in bringing the matter of postal reductions before the paper men and the Typothetæ in this city and under his direction there was held within recent months a special hearing between the local paper men, users of extensive mail matter in other industries, and the Senatorial Committee engaged in investigating the present postal rates and their evil effects upon the various industries that have been adversely affected by the higher rates.

Start New Home for A. S. Datz & Son

Work on the new home of A. S. Datz & Son on the site long occupied by this old established firm of fine and box paper dealers in South Marshall street, below Market street, was begun during the week, when the contractors started excavating for the foundation of the structure. There will be erected on the site an eight story building of the latest fireproof brick and concrete type. It will have all the modern facilities of a first class paper warehouse and business offices with electric elevators, conveyors and fireproof shelving and storage equipment. The heating will be supplied through an oil burning system. It is expected that the quarters will be ready for occupancy by the first of the new year when the executive offices will be removed from their temporary quarters at 142 N. Front street back to the old location, with its modern accommodations.

Waste Merchants To Meet

The proposed meeting of the Rag Division of the Philadelphia Waste Merchants Association, which was to have been held the latter part of September has been postponed until October, when Secretary William J. McGarity, of the Association, and head of the Penn Paper and Stock Company, will arrange for a gathering of the members for the purpose of perfecting plans for the grading of rags by the local dealers on a more stringent basis than that now in force. It is for the purpose of giving to the Philadelphia trade a system of grading that will conform with the requirements of the mills so as to place the local products on a par with packing of rags by other centers now enjoying a large mill patronage that the meeting is called. The special meeting will

take place under the Chairman of the Division, John A. Murphy, who is specially interested in perfecting the rag packing regulations of the Philadelphia trade and who will introduce the various plans suggested by the members for adoption as the standards after they have been discussed at this special gathering. No date has been set at this time, but it is anticipated that it will be after the middle of the month.

S. S. Garrett to Deal in Imported Papers

Sylvester S. Garrett, who has long been identified with the coarse paper trade of this city, with headquarters at 259 S. 3rd street, and one of the best informed men on paper in this field, has added to the numerous lines of specialties carried by his firm imported vegetable parchments and glassines from the German mills. He will represent a Tuetonic manufacturer located at Frankfort on Maine, carrying a stock of these grades in his local warehouses, the papers being shipped to Philadelphia by way of Rotterdam.

Murphy Co. to Equip Mill With Rai Tillieres

Just returned from a round of the New England mills, President John A. Murphy, head of the Daniel I. Murphy Company, Brown Building, 4th and Chestnut streets, has arranged for the shipment of Rai Tillieres Wires for the equipment of the Fourdrinier machines in the plant of the Strathmore Paper Company of Mittineague, Mass. The Murphy Company is the American representative for the French make of Fourdrinier wires and has been enjoying a broadening patronage for the importation since taking over the distribution in this country. During his round of the mills he was able to clean up on many of the importations of rags purchased upon his recent trip abroad and particularly a large stock of wiping rags.

Elmer E. Garrett, Jr., Joins General Electric Co.

For the purpose of perfecting himself in the electrification of mills and equipment, Elmer E. Garrett, Jr., son of Elmer E. Garrett, of the Garrett Paper Corporation, Newtown Square, Pa., has joined the forces of the General Electric Company at Schenectady, N. Y. The younger Garrett has been associated with his father in the Newtown Square Mills, known as the Forrest Mills; which have recently been entirely equipped with electrical motors and other apparatus. Desiring to learn more of the paper mill and its electric appliances for the purpose of developing his father's business on a larger scale he secured a position on the General Electric staff and will learn the practical side of this special service for the paper trade. The Forrest Mills are now producing carpet lining, sheathing, felts, chip board and other specialties.

Wilson Paper Co. Under New Head

The Wilson Paper Company, one of the oldest of Philadelphia coarse paper distribution firms, has passed into the control of Edward A. Wilson, son of the late William A. Wilson, whose death occurred last July. The elder Wilson's demise was sudden, having followed an attack of heart failure, although the former head of the firm had been ailing for the past two years. The Wilson Paper Company, now located at 118 N. 3rd street, has been in existence for more than 60 years, having been founded by Henry L. Wilson, father of the late proprietor. It was long known as Henry L. Wilson Sons' Company, with the two sons of the founder, William A. Wilson, and his brother, Senator Edward A. Wilson, of New Jersey, forming the partnership. The latter withdrew from the firm to enter the insurance business in Atlantic City, New Jersey, his death having preceded that of his brother by six months. The late proprietor was a 32nd Degree Mason and was buried with Masonic services. His son will continue the same line of business, dealing in coarse papers, bags, twine and specialties.

Program For TAPPI Convention

KALAMAZOO, Mich., October 1, 1925.—The 1925 Fall meeting of the Technical Association of the Pulp and Paper Industry will be held in Kalamazoo, October 14 and 15. It will bring to this city about 125 to 150 delegates, all of them men widely known in the paper industry and closely identified with its activities. Already a large number of reservations have been made.

Registrations will be the first order of business for Wednesday morning. The first session will be called to order by President George K. Spence, who is with the New York and Pennsylvania Company, Johnsonburg, Pa. He will give his annual address.

The morning session will be devoted to paper testing in all its various phases and this discussion will be under the direction of B. W. Scribner, chairman of the paper testing committee and chief of the paper section of the National Bureau of Standards at Washington.

A buffet luncheon will be held at the Park-American at noon, followed by a session devoted to a discussion of white water waste in paper mills, dealing also with the prevention of stream pollution. This discussion will be headed by George D. Bearce of the News Print Service Bureau, New York City, and Vance V. Edwards of the Forest Products Laboratory at Madison, Wis.

The banquet will be held Wednesday evening at 7 o'clock.

Thursday morning a general discussion of drying paper will be taken up. This will be led by W. Noyes Baker of the International Paper Company, New York City, and R. W. Leeper of Howard S. Taylor, consulting engineers, Dayton, Ohio. This will be followed by luncheon and a visit to the local mills Thursday afternoon.

The headquarters of the convention will be at the Park-American hotel. Through an invitation from Jacob Kindleberger, president of the Kalamazoo Vegetable Parchment Company, the Thursday morning session and luncheon will be held at the Parchment community house. The local committee on arrangements includes W. J. Lawrence, vice president of the Western Paper Makers Chemical Company; and Ralph A. Hayward, general manager of the Kalamazoo Vegetable Parchment Company.

To Sell Plant of Whitmore Mfg. Co.

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., October 5, 1925.—Receiver Russell L. Davenport in charge of the affairs of the Whitmore Manufacturing Company was authorized by Judge Edward T. Broadhurst at civil sitting of the Hampden County Superior Court last week to sell the land, buildings, machinery and good-will of the company at private sale or at auction as seemed best within ten days.

In case no better price than $150,000, which had been offered by a group of men headed by John J. White, is made, it is understood, the receiver is authorized to accept the offer. This offer is plus the cost of an inventory.

The case came before Judge Broadhurst on an amended petition of the receiver for instructions relative to the sale of the property At this sitting of the court the receiver was represented by Attorney Eugene A. Lynch, while Attorney William P. Hayes represented John J. White, Robert S. Kneeland of the International Paper Company and Attorneys Thomas J. Lynch and Fred F. Bennet, for certain of the creditors.

Beveridge Paper Co. Sends Out Samples

INDIANAPOLIS, Ind., October 5, 1925.—The Beveridge Paper Company of Indianapolis, is sending out to the trade a complete set of tough check samples in all colors, in 3 and 6 ply.

The mailing piece is in the shape of an envelope and is made from 3 ply green tough check. In the envelope in addition to unprinted samples of each color and ply, there are also some printed samples suggesting ways in which the Beveridge Tough Check can be used.

New Trade Agreement Benefits Canadian Mills

News Print Manufacturers Will Now Be Able to Export Products to Australia Free From Tariff Charges—Good Share of Paper Business in the Antipodes Should Be Captured by Canada—Alberta Government Issues Report on Waste Straw Paper Experiments.

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., October 5, 1925.—Much satisfaction is felt in local pulp and paper circles at the official announcement of the ratification of the trade agreement between Canada and Australia by the Australian Government and stating that the agreement would become effective on October 1, as a result of an order-in-council passed at Ottawa. While the concessions granted by each country include a wide variety of products, the chief interest here lies in the fact that the news print manufacturers of this country will be able to export their product to Australia free from tariff charges, as compared with the present duty of £3 per ton. Under the new conditions, the Canadian mills should be enabled to capture a good share of the business in Australia, which country, it is estimated, at the present time uses about 100,000 tons of news print per year. In view of the general admission that overproduction of news print in this country is an established fact, such an opening up of a new market is a decidedly healthy development.

Riordon Company Dividend Report

Creditors of the Riordon Company, Ltd. (in liquidation), were in receipt during the week of a first and final dividend sheet providing for the distribution of the assets of the company, the physical properties of which recently went under the hammer to the International Paper Company. The communication is from Gordon W. Scott, the liquidator, who gives notice that final distribution will be made after November 2, subject to such objections as may be sustained with the approval of the court. The Superior Court will be petitioned on October 22 for approval of the dividend sheet. The statement shows after payment of bank and preferred claims, only $100,802 distributable among privileged claimants for the sum of $1,276,759; and only $1,668,068 for the $6,180,000 of first mortgage bonds. Nothing is left for the general mortgage bond-holders or the unsecured creditors of the company.

Straw Paper Experiments Successful

The Provincial Government of Alberta has issued the following report on the experiments which have been conducted with a view to manufacturing paper from the straw that is wasted on the prairies:

"As a result of successful experiments in the making of paper and paper products from waste straw in Alberta, which have been conducted under the auspices of the provincial government, the government is now making an effort to interest capital in the proposal to establish a plant or plants in the province.

"The government expresses confidence in the success of such an enterprise, and states that the results of the experiments made have been of the greatet importance not only to the farmers but to the general industrial development of the province.

"A special report on the experiments has been made by Trade Commissioner Stutchbury, to Premier Greenfield. Investigations were made into all known experimental processes for the manufacture of pulp from straw, and finally about two years ago the Government made arrangements for laboratory tests of the Bache-Wiig process in the Pulp and Paper Division of the Forest Products Laboratories, Montreal, under the joint supervision of E. Parke Cameron, the Superintendent of the Division, and John Bache-Wiig, who was co-inventor with his father in the process.

"As a result of the success which attended the tests carried out in Montreal, the Alberta Government employed a well known pulp and paper engineer to make a local survey of the conditions which were necessary for the commercial success of a plant in this province. The following points were considered:

"1. Availability of straw with an economic radius.
"2. Availability and cost of coal.
"3. Availability and cost of salt and sodium sulphate.
"4. Railway facilities and freight rates.
"5. Labor conditions.
"6. Water and sewage facilities.

"An exhaustive report on these subjects has been received by the Government covering a number of points in the province. This report together with all technical reports is being placed at the disposal of groups of capital who may be interested in the development of this important new industry."

Port Alfred Mill Ready Next Spring

The Port Alfred Pulp and Paper Corporation, of Port Alfred, Que., successor to the Bay Sulphite Company, Ltd., has declared an initial dividend of 1¾ per cent on the preferred stock. The position of the company will be further improved by the carrying out of plans for further development now under way. It is learned that the company will be producing news print in considerable volume next year, the program providing for the operation of the first machine of 115 tons daily capacity on May 1 next year, and the coming on of the second machine of equal capacity, by the first of August. This would bring the total production by the Fall next year to 230 tons daily, or about 70,000 tons per annum.

The management plans to increase the sulphite pulp production by the extra amount required for the news print mill, thereby leaving it still with the present pulp supply as a surplus over and above news print requirements. This amounts to about 170 tons daily, or 50,000 tons per annum, so that the total capacity of the mill when the present extensions are completed, will represent 120,000 tons of paper and of surplus pulp, or an average of about 400 tons daily.

Kaministiquia Power Co. Deal

When shareholders of the Kaministiquia Power Company met in Montreal during the week they confirmed and ratified the sale of the company's assets to a new company of the same name, which will be organized by the Fort William Paper Company. It is expected that full payment and settlement of the transaction will be made in the near future. Under the arrangement, the outstanding bonds of the present company will be redeemed at 105 and interest and the capital stock purchased at $95 per share, plus $50 in the 7 per cent cumulative stock of the new Kaministiquia company. The present company will carry on as an operating entity until formerly taken over by the new interests. It is not believed that any readjustment in organization or working forces will be effected. The only alteration which has been effected since the issuance of the circular to shareholders outlining the plan is that the new company will ask for an authorized bond issue of $6,000,000, instead of the $5,000,000 previously indicated.

That present shareholders of Kaministiquia Power Company will be amply protected in accepting as part payment for their present holdings the 7 per cent cumulative preferred stock of the new power company to be organized by the Fort William Paper Company, Limited, seems assured. Three members of the board of the present company will be appointed to the board of the new

(*Continued on page 36*)

Out of 219 *Vickery Felt Conditioners* sold in fifteen months, 111 were repeat orders.
This certainly spells SATISFACTION!

Vickery Felt Conditioners
combine a certain means of increasing production with a sure way of improving quality.
A trial will convince you too!

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Kimberly-Clark Entertain Paper Distributors

About Seventy-five Paper Dealers From Prominent Jobbing Centers Are Present at the Eighth Annual Convention of Company at Neenah—Northern Paper Mills of Green Bay Win in Fight For More and Cheaper Power—To Dedicate Whiting Athletic Field

APPLETON, Wisc., October 5, 1925.—About 75 paper dealers from the large distributing centers of the United States were in Neenah Wednesday and Thursday of last week as guests of the Kimberly-Clark Company at the eighth annual convention of the company personnel and its paper merchants and distributors.

These annual meetings between the officials of the company and its distributors are held to aid the paper merchants in furthering the sale of the various papers manufactured by the company and make closer the contact between the manufacturing and the distributing agencies of the trade.

The convention opened Wednesday morning with an open meeting at 9 o'clock in the offices of the company. At 12.30 the visitors were guests at luncheon at the Valley Inn. Entertainment was provided for the afternoon. A dinner for the guests and officials and operating heads of the company was held at 7 o'clock in the evening.

Thursday morning the visitors were taken on an inspection trip through the experimental mill and main laboratory and through the Neenah, Badger and Globe mills at Neenah. Later they were taken through the plant of the Cellucotton Products Company, a subsidiary of the Kimberly-Clark Company. At 11 o'clock the party was taken for an inspection trip through the company's mill at Kimberly and was entertained at luncheon in the Kimberly clubhouse.

After luncheon a continuation of the business meetings was taken up. The discussion included technical matters to aid the merchants in furthering the sale of the company products. Guests and officials also took a part of the afternoon for golf at the Butte des Morts Country Club between Neenah and Appleton. The convention closed with dinner at the Riverview Country Club at Appleton.

Among the members of the party were: Joseph Piere, M. R DePear, G. R. McPhearson, H. F. Bagley, H. D. Fralich, E. J. Schmidt, W. J. Herrmann, George Gould, Jerry Pollock, Oscar Sunwell, H. S. Bull, C. D. Brown, H. A. Rowley, C. Bratech and E. C. Cook, Chicago; C. W. Dau, Des Moines, Iowa; C. R. Peld and J. B. Jones, Omaha, Neb.; L. R. Boswell, J. Ashley and F. Stettwell, Minneapolis, Minn.; C. W. Lewis, C. W. Musick, St. Louis, Mo.; E. A. Petrequin, Cleveland, Ohio; W. J. Nermann, Milwaukee, Wis.; James E. Weiger, Kansas City, Mo.; H. Helmer, Detroit, Mich.; Fred Forscheimer, Pittsburgh, Pa.; L. E. Sayer, C. A. Newfancy and M. R. Pear, of New York City.

Nekoosa-Edwards Paper Co. Build Dam

A 20-foot dam near the mouth of Four Mile Creek, south of Wisconsin Rapids, which is now under construction by the Nekoosa-Edwards Paper Company, will impound a lake two miles long and from one-fourth to one-half mile wide. The lake will be stocked with game fish and will create a recreation spot. Construction of the dam is to supply the Port Edwards mill with pure water for the manufacture of paper.

More and Cheaper Power for Paper Firms

Following decisions in the courts of Brown and Oconto Counties in favor of the Wisconsin Gas and Electric Company for extension of a power line from Green Bay to the northern part of the state, condemnation proceedings have also been started in Marinetta County court. Arguments in that court were completed this week.

The high voltage transmission line will carry cables both for the W. G. & E. and the Northern Paper Mills of Green Bay. The paper mill will bring in power from White Rapids on the Menominee River, about 40 miles north of Menominee, Mich., while the power company, a subsidiary of the North American Company, will use the arms on one side of the towers from Green Bay to Amberg, a village west of White Rapids.

Officials of both the power company and the paper mill found the decisions of the two courts very gratifying and are watching closely for the action of the Marinette County court.

Although we are interested spectators, we feel that this decision will bring a step nearer our plans for a larger power plant. It will be the largest in the Fox River Valley, and will provide us with a surplus over our present needs.

"We planned this plant with a surplus of power in mind, because we want to grow and if we are to do this, we must have a plentitude of cheap power available. Paper mills need cheap power and lots of it in order to compete with their competitors who enjoy these advantages. With the construction of this plant, we will be on an equal footing with many of our competitors, which means more business and a greater expansion of the Northern Paper Mills."

To Dedicate Whiting Athletic Field

The George A. Whiting Athletic Field and the George A. Whiting field house, of Lawrence Colle, Appleton, donated by a Neenah paper manufacturer, for whom both the field and fieldhouse are named, will be dedicated October 17 in connection with the football game between Lawrence and Coe College of Cedar Rapids, Iowa.

The tract contains about 17 acres of land and is located near the Interlake Pulp and Paper Mill of the Consolidated Water Power and Paper Company. When fully developed, it will rank among the best athletic fields in the Middle West. For the present, football games will be played on a bluff of this site, but later a stadium will be erected in the ravine of this property, which forms a natural amphitheatre. The field house, just completed, is 64 x 34 feet, and fully equipped with showers and rest rooms and is well heated.

Mr. Whiting is president of the George A. Whiting Paper Company, Menasha, and the Whiting-Plover Paper Company, Stevens Point, and has many other large interests. He is well known for his philanthropic activities.

Kimberly-Clark Co. Entertains

With approximately 90 men of the maintenance and construction department, of the Niagara mill of the Kimberly-Clark Company as its guests, the company, represented by the local manager, E. W. Striddle, local safety director, Thomas Vaughter, and the general superintendent of service and safety, M. G. Hoyman, entertained at an evening dinner in Kimblark Inn, Niagara, one day last week.

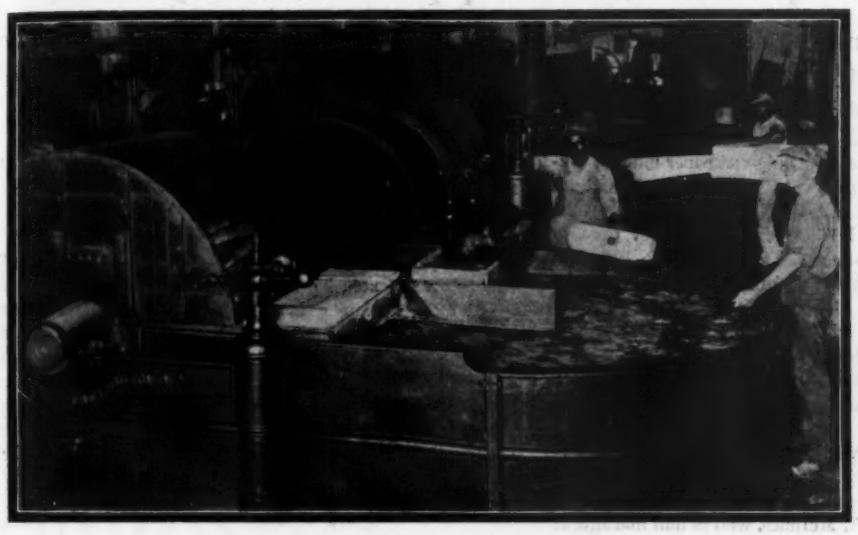
The occasion was the celebration of the three-hundredth anniversary of the maintenance and construction Safety Man. This department had a record of 95,561 consecutive days of safety, that is, without a lost-time accident.

At the close of the meal, as is the custom of the company, when a department has reached a 100 year safety mark, each man received an envelope containing five crips new one dollar bills. Each man also made an avowal to continue his efforts to maintain safety and pile up a still bigger record. They are anxious to be known as the safest department in the safest paper mill in the world. Pictures of these men will be shown at the National Safety Congress in Cleveland.

General News of the Wisconsin Trade

Jack Kimberly of the Kimberly-Clark Company, Neenah, recently won the Valentine trophy, one of the most important cups of the

(*Continued on page 38*)



Standard
Paper Mfg. Co.
Richmond

IN OLD VIRGINIA

These Dilts Beating Engines built a quarter of a century ago are an argument in favor of iron tubs. Wood tubs of such an age would be worn out, but these Dilts iron tub Beaters look good for at least another quarter century run.

They have served well, for in Virginia too "their paper is made in their beaters," and Dilts beaters have always been good.

The latest improvement in Beating Engines is the Dilts approved NEW TYPE Beaters first built in the year 1924. These approved NEW TYPE Beaters are fast circulating engines. They beat and mix rapidly, dump quickly, handle thick stock, and **consume no more power** than ordinary Hollander beaters.

Write for prices and information; get a list of the users, and examine into the merits of the Dilts approved NEW TYPE beating engines.

You will be interested.

Dilts

MACHINE WORKS, Inc. FULTON, N.Y.

EXPORT OFFICE ~15 PARK ROW~ NEW YORK CITY

Ontario Paper Mills Support Safety Work

Educational Films Shown at Successful Rallies Held at Iroquois Falls—International May Convert Riordan Sulphite Plant Into Big Power House—Extensive Timber Cutting Rights to be Disposed of—Thunder Bay Pulp Wood Shipments Have Been Heavy

TORONTO, Ont., October 5, 1925.—The pulp and paper mills of Ontario are taking greater interest than ever in Safety Work and are being supported and encouraged in this splendid movement by the Hon. Dr. Godfrey, Minister of Public Health and Labor for Ontario, A. P. Costigane, secretary-manager of the Ontario Pulp and Paper Makers Safety Association, and others. In a recent address, Dr. Godfrey stated that there were altogether too many accidents in logging operations and costs were running too high for medical attention, compensation to workmen, etc. Through too frequent accidents, he said that fifty cents was being added to each thousand feet of sawn lumber and thirty cents to each cord of pulp wood.

The paper and pulp mills show a better record than the lumber industry. Recently two successful rallies in the interest of Safety work were held at Iroquois Falls under the auspices of the Abitibi Power and Paper Company, R. A. McInnes, who is mill manager at Iroquois Falls, presided at the gatherings, which were well attended. Mr. McInnes is also president of the Ontario Pulp and Paper Makers Safety Association. Various films of an educative character were shown and addresses on different phases of Safety Work and its importance were delivered by A. P. Costigane of Toronto, secretary-engineer of the Ontario Pulp and Paper Makers' Safety Association; M. W. Parker, of Albany, N. Y., president of the International Brotherhood of Papermakers, John P. Burke, of Fort Edward, N. Y., of the International Brotherhood of Pulp, Sulphite and Paper Mill Workers; Victor A. Sinclair, of Toronto, Chairman of the Workmen's Compensation Board, and others. A rally was also held in the interest of the school children.

Riordon Plant May Resume

There is a report that the sulphite plant at Merritton, Ont., which was operated for many years by the Riordan Company, and has been closed for about two years, may be reopened. The plant, which is now owned by the International Paper Company, is equipped with four digesters and three wet machines and its capacity is 30 tons of sulphite fibre daily. When the mill was operating under Riordan control the monthly wage bill was about $32,000. There is talk of the International Company converting the mill into a big power house, power being developed on the old Welland Canal from the big wastage at Goose Island, near the Thorold town line.

New Pulpwood Center Looming Up

Government surveyors busily engaged during the past few months in surveying the township of Long Lac, Ont., have already laid out more than 100 lots ready for settlement. Prospects of the settlement, now numbering in the neighborhood of 50 people, going rapidly ahead, are favorable. Local residents are looking forward with keen interest to the commencement of work on the new paper mill of the Great Lakes Paper Company at Fort William, as Long Lac is the center of a vast pulpwood area controlled by that corporation. Wood will be drawn from this region to feed the new mill.

Retiring Mill Manager Honored

E. J. Jones, who for the past three years was general manager of the Spruce Falls Company at Kapuskasing, Ont., and has been succeeded by J. H. Black, of Toronto, was recently presented by the Spruce Falls Company and also by the citizens of Kapuskasing with appreciative addresses. The employees gave Mr. Jones a sterling silver cigar case and the citizens a sterling silver pin, both fittingly engraved. It was pointed out that Kapuskasing was but a forest three years ago and today is a progressive industrial center with many fine buildings and prosperous, contented citizens, largely through the foresight, energy and organizing ability of Mr. Jones.

Will Sell Many Cutting Rights

The Department of Lands and Forests for Ontario is calling for tenders on an extensive number of timber reserves, including the right to cut jack pine in the township of Marjorie, district of Algoma, comprising four limits, having a total area of 81 square miles, the right to cut the red and white pine in portions of Dunbar and Beaumont townships, district of Sunbury, having a total area of 36 square miles, and the right to cut red and white pine timber in the townships of Law and Riddell, having an area of 27 square miles. The time for receiving tenders closes at the end of the present month.

Heavy Shipments of Pulp Wood

The shipments of pulp wood from the Thunder Bay district of Ontario have been heavy during the past season and about 130,000 cords will go forward, in all, before the close of navigation. Most of the wood is consigned to Erie, Pa., but a good deal of it finds its way to Port Huron and Detroit. The value of the product, is in the neighborhood of $1,400,000. Most of this wood was cut by the farmers and settlers and all was from private lands. During the winter, great piles were placed on the ice in the harbor of Port Arthur, Ont., and all summer tugs were busy towing wood from points along Thunder Bay into Port Arthur.

Logging Activities Greatly Reduced

From semi-official information which has been received, it is not likely that logging operations this winter with the lumbermen will exceed sixty per cent of last year. Overproduction has resulted all over in the lumber line and many mills are closing down much earlier than usual. The prospects for a big demand for pulp wood do not look any too encouraging at the present time. A certain amount of business is being transacted, but there is no pep to the market. Mills are well stocked or are buying only in limited quantities and on a conservative basis. After the decided drop in value two or three years ago when big concerns were caught with hugh quantities of wood on hand and had to write off many thousands of dollars on their "wood pile" in making inventories, there has not been the same disposition to stock up.

Toronto Carton Council Convenes

The Toronto Carton Council held its quarterly meeting at the King Edward Hotel on September 28 and there was a good attendance, including representatives of the paper box industry from Hamilton, Guelph, Brantford, Galt, and other outside places. C. B. Pearsall, of the M. D. Knowlton Company, of Rochester, N. Y., spoke ably on "My Observations of the Paper Industry," his address being well received. S. J. Frame, secretary-treasurer of the Council, gave an interesting talk on "Upholding the Maintenance of Mutual Confidence by Keeping Our Obligations." It was decided to invite all the active members of the Canadian Paper Box Manufacturers Association to participate in the prize contest for the best, new set-up box feature in the year 1925, such boxes to be submitted at the first meeting of the Council in February. The winning paper boxes will be decided by a vote of the Council and two prizes will be offered amounting to $25. After the meeting, the gathering sat down to a dinner, which was followed by a theatre party.

(*Continued on page 42*)

BLEACHED and UNBLEACHED
SULPHITES
KRAFT PULPS
GROUND WOOD
NORRONA
PULP STONES

PERKINS-GOODWIN CO.
33 WEST 42nd STREET
NEW YORK

PAPER
PRINTING PAPER
of
EVERY DESCRIPTION

Obituary

Winthrop G. Chappell

[FROM OUR REGULAR CORRESPONDENT]

ST. LOUIS, Mo., October 5, 1925.—Winthrop G. Chappell, 73, president and one of the founders of the St. Louis Paper Company, died at St. Luke's hospital, St. Louis, September 30, of acute nephritis. He made his home with his wife at the Buckingham Hotel.

Mr. Chappell started in the paper business with the Snider & Holmes Paper Company when 19 years old. In 1884 the Garrison, Chappell & Pirie Paper Company was formed and he took a leading part in its organization. In 1887 Mr. Chappell bought out the Snider & Holmes Paper Company, and, combining it with the other firm, incorporated the St. Louis Paper Company of which he was president until his death.

Oliver L. Garrison, Mr. Chappell's partner in the first firm and later vice-president of the St. Louis Paper Company, died last April.

Mr. Chappell is survived by his widow and one daughter, Mrs. Horace S. Rumsey, of 5290 Waterman avenue, St. Louis. Funeral services were held October 2 at the Westminster Presbyterian church.

Pall bearers were Col. Martin Collins, vice president of the Graham Paper Company; Alfred Fulage, treasurer of the Beacon Paper Company; and J. R. Weber, T. H. Cunningham, Conrad Straube, J. W. Mull, Z. F. Hawe and G. H. Sible, all employeees of Mr. Chappell for more than thirty-five years.

Over-Issue Newspapers for Wrapping

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., September 30, 1925.—A growing use for American over-issue newspapers has been found in the Far East where native shopkeepers utilize them as a cheap and acceptable substitute for the higher priced wrapping paper, according to the Paper Division of the Department of Commerce.

Amounting to 18,500 tons in 1922, valued at $445,088, exports of American over-issue newspapers to the various countries of the Far East are rapidly increasing, and rose to 29,581 tons, with valuations of $792,709, in 1924. The first six months of 1925 shows that shipments of 26,078 tons, valued at $651,608, have already been made. The largest purchasers of the American product are Java and Hongkong, but considerable quantities are also shipped to the Philippine Islands, British India, and China, while smaller amounts go to other Far Eastern countries.

Imports of over-issue newspapers into Java and Madura during 1924 amounted to 14,176 short tons as against 11,387 tons in 1923. The United States supplied nearly 90 per cent of these imports, the remainder coming from Great Britain, Singapore, Hongkong, and the Netherlands. The value of over-issue newspapers imported into Hongkong during 1924 amounted to $486,200 as compared with $407,299 in the previous year. Exports of this commodity during 1924 amounted to $442,700, only about 9 per cent of the receipts being consumed locally. Approximately 98 per cent of the importations were from the United States, the remainder coming principally from the United Kingdom. Interior China, the Dutch East Indies, and French Indo-China received the greater part of these shipments.

Approximately half of the imports of over-issue newspapers into India are received through the port of Bombay, the larger part of the remainder being brought in through Karachi and Madras. Great Britain and the United States are the chief sources of supply. There is a growing market in Bombay for the American product. The papers should be clean, over-issue newspapers of standard size, and should be sorted before shipment so that they contain no colored papers and no rotogravure sheets. Any American firm that can supply goods according to certain required specifications and that can build up a reputation for always shipping goods of uniform quality, can develop a profitable business with Bombay.

A considerable transshipment trade is carried on in Singapore, from where shipments of over-issue newspapers of British and American origin are made to the Dutch East Indies, French Indo China, British Borneo, Oceania, and other islands in the South Seas. Large quantities imported into the Straits Settlements are also sold in Singapore, Penang, and throughout the Malay Peninsula. Exports from the United States to this territory are steadily increasing.

Advance Bag Co. Expands Insurance Program

The Advance Bag and Paper Company, of Howland, Me., has expanded its group insurance program, underwritten by the Metropolitan Life Insurance Company to include group health and non-occupational accident insurance, in addition to the group life protection already in force.

In 1920 the Advance Bag and Paper Company presented about 335 employees with group life insurance, totaling approximately $270,000. Each employee, who was actively at work when the coverage became effective, was insured for $500, which was to be increased $250 for each year of service until a maximum of $1,000 was attained. Should any employee become totally and permanently incapacitated before age sixty, the entire amount of his life insurance will be paid to him in equal monthly installments. The entire cost of this insurance is borne by the Advance Bag and Paper Company.

The recent policy was written on a co-operative basis, employer and employees jointly paying the premiums. In the event of illness or non-occupational injury, each contributing employee will receive $10 a week for a maximum of twenty-six consecutive weeks.

Supplementing the actual provisions of the contracts, which include exemption from medical examination, the Metropolitan Life distributes without cost to insured employees pamphlets on health subjects, such as "Let Vaccination Keep Smallpox Out of Your Home," "The Child," "Eyesight and Health," "Accidents in the Home and How to Prevent Them," and many others of equal interest.

NEW TRADE AGREEMENT

(*Continued from page 30*)

Kaministiquia Power Company to be incorporated to take over the old organization. These directors will be Sir Herbert Holt, J. S. Norris, and N. M. Paterson. Sir Herbert is present of the present company. Mr. Paterson is vice-president and Mr. Norris a director and official.

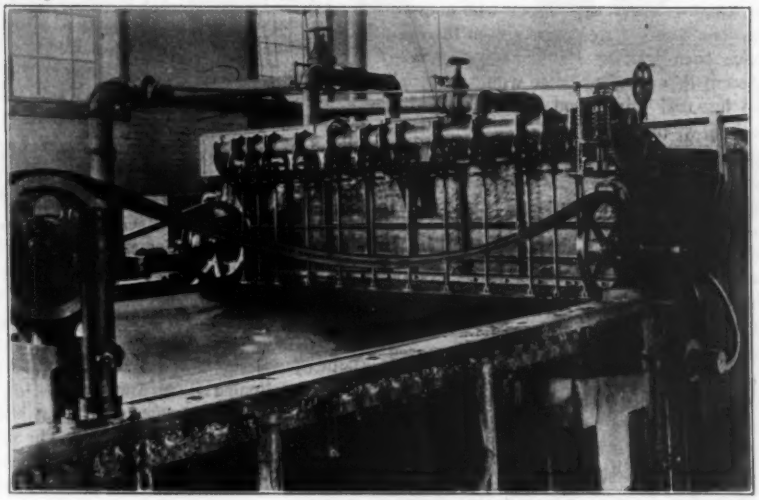
This will mean that the board of the new company will be practically identical with the present board of the Fort William Paper Company.

Rumors of Mergers

Rumors continue to circulate here regarding the imminence of news print mergers. It is stated that it is only a matter of time before the Spanish River-Abitibi fusion becomes a fact and that there are fresh signs of interest being taken in the merger of St. Maurice Valley paper companies.

Mattagami Pulp Developments

Mattagami Pulp and Paper Company, Ltd., are installing a high density bleaching plant in their mill at Smooth Rock Falls, Ontario. S. R. Armstrong, general manager, on a visit to Montreal, said that he hoped to be producing by January 1. The plant will have a capacity of 200 tons of bleached sulphite per day and 50 per cent of this amount will be in course of manufacture at the beginning of the new year. Mr. Armstrong stated that everything was going satisfactorily at the plant, and that the company's unbleached sulphite was meeting with a ready market.



An Increase *of* 100% In Voith Inlet Sales

SOME of the USERS of the VOITH INLET

Kimberly Clark Company	7
Hammermill Paper Company	5
Menasha Printing & Carton Co.	3
Marathon Paper Mills Co.	3
Mead Pulp & Paper Company	6
Northwest Paper Company	3
Howard Paper Company	2
Champion Coated Paper Co.	2
Lakeview Paper Company	2
Hammersley Manufacturing Co.	2
Nekoosa-Edwards Paper Co.	4
Eastern Manufacturing Co.	2
Rhinelander Paper Company	2
Warren Manufacturing Co.	4
Bergstrom Paper Company	2
Wisconsin River Pulp & Paper Co.	2
Itasca Paper Company	2

Voith High Pressure Stock Inlet sales for the past nine months show an increase of 100% over the total sales for the entire year of 1924. Repeat orders continually come in every month from the many users of this device. The list of new users steadily grows larger and the Inlet is now generally used throughout the prominent paper-making sections of the country.

A machine that is so widely purchased in a dull period must be a good piece of equipment for paper-makers have been buying only machinery that produces better paper and lowers the cost of production.

Have you our booklet containing full particulars about the Inlet and experiences of users? Write for your copy at once.

VALLEY IRON WORKS CO.

APPLETON, WISCONSIN

New York Office: 350 Madison Ave.

Paper Demand in Boston Improves

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., October 5, 1925.—Good fall business sums up the situation in the Boston paper trade circles this week. This fact was apparent even to the casual observer, and to one who goes behind the scenes the impressions received were better even than last week. Boston houses have been waiting for some considerable time, wondering when a decent flow of good trade would materialize. There is no question but that this period has arrived, after lightly but insistently knocking at the door.

The fine paper houses would like the return of days when the printers purchased in case lots—thereby saving 2 cents a pound or so; but the hand-to-mouth methods seem to remain strongly entrenched. There is no doubt but that the small lot buying creates more work and consequently higher cost throughout any organization, and this is not particularly peculiar in the paper trade. While no radical price changes have occurred in fine papers, the market is strong with good demand prevailing.

All divisions of the coarse paper trade have felt the increased demand. Kraft mills are busy and jobbers continue to increase their stocks. Box and chip boards moved much more freely this past week, with practically all sales at the new prices. One prominent box mill reports extremely heavy business,—more particularly in their shoe container. The New England shoe trade has had an abnormal slow period until quite recently, and it is very noticeable that this trade is consuming a large volume of the various products,—tissues, box coverings, Kraft wrapping and shipping containers. Roofing papers and felts maintain their high level of consumption, though it was the belief of some that there would be a perceptible falling off by October 1, but it is now certain that this particular division of the trade will have good business throughout October.

The rag and paper stock houses still insist this week on reporting practically no business. They admit that the mills are picking up a car here and there, but in no regular or dependable volume. Although these rag stock houses would not admit of better conditions in the near future, it would seem that the general healthy increase of the paper trade in Boston would of necessity result in the mills coming into the market for stock.

Tissue Paper Men to Meet in Chicago

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., October 7, 1925.—Tissue paper manufacturers, distributors, and consumers are being asked by officials of the Simplified Practice Division of the Department of Commerce to attend a meeting in Chicago on October 8. In connection with this meeting H. R. Colwell, who is handling the project for the Department of Commerce, is sending the following invitation to attend:

In cooperation with the Division of Simplified Practice of the Department of Commerce, a committee of the tissue paper industry has formulated a definite recommendation as to sizes and count of tissues. This action is based upon survey data showing present diversity, and is the result of several preliminary conferences.

As the procedure of this Division requires that the committee's recommendation be submitted to the industry as a whole, before it can be made a part of the Department's "Elimination of Waste" series, a general conference has been called at the Drake Hotel, Chicago, Illinois, on October 8th at 2:30 p. m., in conjunction with the annual convention of the National Trade Paper Association.

You are cordially invited to attend this conference and take an active part in its discussion. A copy of the recommendation is inclosed for your information.

As the success of all conferences of this character depends entirely upon the representation secured, I trust you will arrange to be present or designate some one to substitute for you. In the event that you cannot do either, will you favor me with your comments by letter?

The proposed recommendations follow:

No. 1 and No. 2 Sheet Tissue: 20 x 30—480; 24 x 36—480.

Tissue for shoes: 8½ x 15; 11 x 20; 12 x 24; 13 x 26. (Sizes to be standardized on the basis of 24 x 36—480—10 lb.)

Napkins: Full crepe, 13½ x 13½; semi crepe, 13 x 13; over size, 18 x 18.

Toilet paper: Sheet toilet, 5 x 7, in packages of 500 and over. Roll toilet, 4½ x 5—1000 and 2000 sheet rolls; 4½ x 5; 4½ x 4¼; 4½ x 4½.

News of the Portland Paper Industry

[FROM OUR REGULAR CORRESPONDENT]

PORTLAND, Ore., September 17, 1925.—The new unit of the Western Paper Converting Company's plant at North Salem is already well under way, a crew of fifty workmen being engaged on the construction with a view to rushing it to completion as soon as possible. It will cover a ground space of 100x240 feet, being built of concrete and glass at a cost of $35,000.

The Columbia River Paper Mills, of Vancouver, Wash., had a record output in August, which was their most productive month since operation began a year ago. The production during the month was 125 tons more than any previous month. An electric driven Woods planer has been shipped and will probably arrive in time for installation October 1.

William Vattles, of Franklin, Ohio, has arrived in Longview, Wash., to accept the position of superintendent of the new plant of the Pacific Straw Paper and Board Company, which will begin operation about October 1, employing at the start about fifty men.

St. Regis Co. to Build

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., September 28, 1925.—The St. Regis Paper Company has decided to start the erection of its pulp and paper mills at Cap Rouge, Que., in May, 1926. The company has purchased for this purpose $85,000 worth of land from the Dominion Experimental Farm. Timber will be obtained from the large limits of the company on the North Shore along the Lower St. Lawrence, and also from the Abitibi district. Advantage of the Transcontinental Railway, which passes a short distance from Cap Rouge, will be taken to bring the wood, while the company will have several large boats operating between the North Shore and some point near the Quebec Bridge, where landing facilities will be arranged.

WISCONSIN TRADE NEWS

(*Continued from page 32*)

Inland Lake Yachting Association regatta at Lake Geneva, with his yacht *The Shadow*. Four of the crew were Kimberly-Clark men, Mr. Kimberly, William Kellett, William Ritchie and John Williamson.

LaVerne Smith, 25, a workman, lost his balance while working on the Nekoosa-Edwards Paper Company dam in the Wisconsin River at Nekoosa and fell through the flume upon the rocky bed of the tailrace, fracturing three ribs, one of which punctured a lung.

The Marshall Paper Company of Appleton, wholesalers, won their suit against the Green Bay Star newspaper, the Farmer-Labor Publishing Company, et al, of Green Bay, in the circuit court of that city this week. The plaintiff sought to recover about $500 due for paper. F. H. Shoemaker, president of the Farmer-Labor Publishing Co., testified that he informed the paper company when making the purchase that the publishing concern had leased its plant to the Star and had no connection with the transactions and that he was merely employed as business manager for the new concern. The jury found that Shoemaker represented to the paper company that the purchase was for the Star, operated by the same people as The People's Voice, another labor paper.

BELOIT, IS MAKING RECORDS!

Unparalled in the history of paper-making are the records established with the NEW BELOIT FOURDRINIER.

Extracts from reports received from actual users tell the story:

A 15% increase in production in one mill resulted a few days after its installation.

A New York mill started its NEW BELOIT and was making 20-lb. paper in counter rolls 15 minutes after the stock was turned on the machine.

A Michigan mill ran a NEW BELOIT continuously from Nov. 18th, 1923 to May 3rd, 1924 without a wire change.

595 man hours, 51 production hours saved and corresponding tons increased production in wire changes alone.

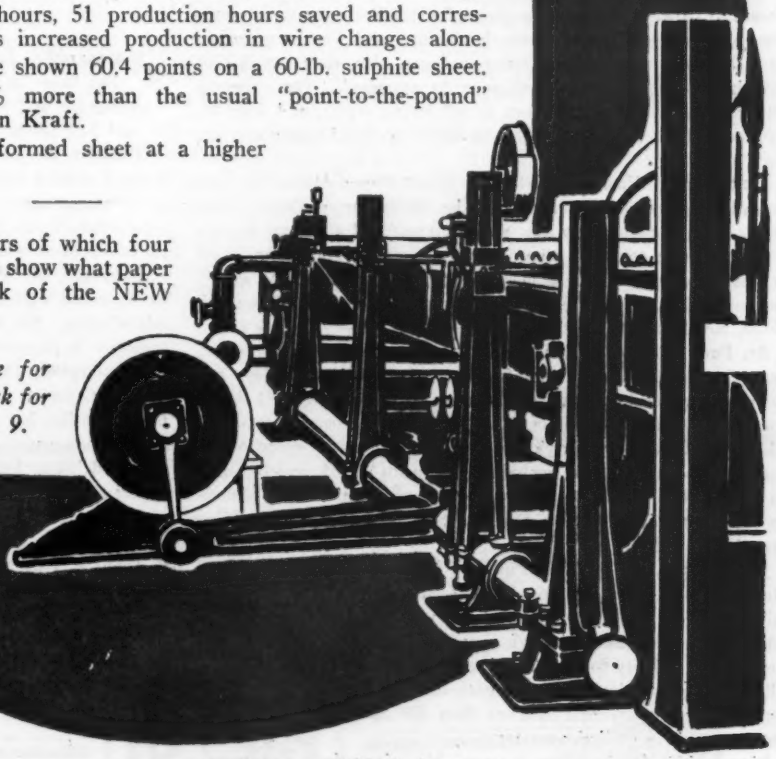
Tests have shown 60.4 points on a 60-lb. sulphite sheet.

26 to 44% more than the usual "point-to-the-pound" established on Kraft.

A better formed sheet at a higher speed.

Sixteen orders of which four are re-orders show what paper makers think of the NEW BELOIT.

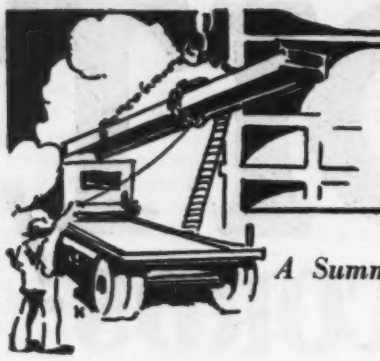
Investigate for yourself. Ask for Bulletin No. 9.



The NEW BELOIT FOURDRINIER

Beloit Iron Works **Beloit, Wis., U. S. A.**

Since 1858 Builders of Paper, Board Mill and Container Plant Machinery



CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

Construction News

Elizabeth, La.—The Calcasieu Sulphite Paper Company, recently formed with a capital of $1,750,000, has taken over the local mill of the Calcasieu Manufacturing Company, and will remodel and expand for a new plant. Plans are said to be in progress for enlargement in buildings, with the installation of considerable machinery for increased output. R. M. Hallowell is president, and S. M. Lee, vice-president.

Sandusky, Ohio—The Paper and Textile Products Company, Market and Fulton streets, has tentative plans under advisement for a new addition to its plant. The project is expected to mature in the near future. W. H. Millspaugh is president.

Lynn, Mass.—The Hoague-Sprague Corporation, manufacturers of paper boxes and containers, has secured an option to purchase a factory on Broad street, heretofore used for the manufacture, and will remodel and improve for a new plant. A list of machinery to be installed will soon be arranged. The company will continue its present factory at 528 Broad street, and with the new acquisition will have a total of 33,000 sq. ft. of manufacturing floor space.

Bellingham, Wash.—The Pacific Coast Paper Mills, Inc., rerecently organized by officials of the Westminster Paper Company, soon to construct a new mill at Army and Chestnut streets, is said to have tentative plans under advisement for a new plant in this same section. The company is capitalized at $75,000, and is headed by J. J. and M. F. Herb, George H. Bacon and George V. Nolte, Bellingham.

St. Paul, Minn.—Brown & Bigelow, Inc., University avenue, near Syndicate avenue, manufacturer of paper specialties, has awarded a general contract to the James Leck Company, 211 South Eleventh street, Minneapolis, Minn., for its proposed three-story addition, 80 x 300 feet, brick and reinforced concrete, estimated to cost in excess of $100,000, including equipment. Work will begin at an early date. Colburn & Forsell, 210 South Ninth street, Minneapolis, are architects; G. M. Orr, 816 Second avenue, South, Minneapolis, is engineer.

Jacksonville, Fla.—The Pulpine Manufacturing Company, Menasha, Wis., manufacturers of pressed pulp products, including pails, tubs, etc., with branch mill at Neenah, Wis., is reported to be considering the construction of a new mill at Los Gatos, a proposed industrial city to be established about 15 miles from Jacksonville. The initial plant will aggregate close to 8,000 sq. ft. of floor space, giving employment to more than 400 operatives. The project is now in a preliminary stage.

Riegelsville, N. J.—The Warren Manufacturing Company, 342 Madison avenue, New York, is pushing construction on a new addition to its local paper mill, to be a three-story, 70x130 feet, and expects to have the structure ready for the machinery installation in the near future. The estimated cost has not been announced. A general contract for the mill was awarded recently to the H. R. Ferguson Company, Euclid avenue, Cleveland, Ohio.

Montreal, Que.—The Abitibi Power and Paper Company has begun work on an expansion and betterment program at its news print mills, to include the installation of three new paper-making machines, in addition to the seven such machines now in service. Four of the present machine units will be remodeled, and speeded up about 25 per cent. Other machinery will also be installed. The work will be carried out over a period of from twelve to eighteen months. The company is now running under regular capacity at the mills, giving employment to close to 1200 persons, as well as a working force of approximately 1500 on the timber lands.

Three Rivers, Que.—The new local plant of the St. Maurice Paper Company, Canada Cement Building, Montreal, Que., will consist of four individual operating units adjoining the present mill at this location. Additional power facilities will be provided. It is expected to have the initial plans ready in the near future. The plant will cost close to $5,000,000, with machinery.

New Companies

Indianapolis, Ind.—The Cash and Carry Paper Company, Inc., has been incorporated with a nominal capital of $5,000, to manufacture and deal in paper specialties. The incorporators are T. and Sol Solomon, both of Indianapolis.

Trenton, N. J.—The Spranza Brothers, Inc., has been incorporated with a capital of 1,000 shares of stock, no par value, to manufacture paper boxes, containers and kindred specialties. The incorporators are Joseph, John and Samuel Spranza. The company is represented by Charles J. Falcey, Trenton.

Dansville, N. Y.—The Berwin Paper Corporation has been incorporated with a capital of $350,000, to operate a paper mill in this vicinity. The incorporators are G. D. and M. J. Newton. The company is represented by L. C. O'Connor, Geneseo, N. Y.

Wilmington, Del.—The Shepard Paper Products, Inc., care of the Colonial Charter Company, Ford Building, Wilmington, representative, has been incorporated with a capital of $200,000, to manufacture paper goods.

Philadelphia, Pa.—The Frank A. Rolling Company is being organized under state laws to manufacture and deal in paper bags, containers and kindred products. Application for a state charter will be made on October 19. The company is represented by Lester B. Johnson, 1026 Stephen Girard Building, Philadelphia.

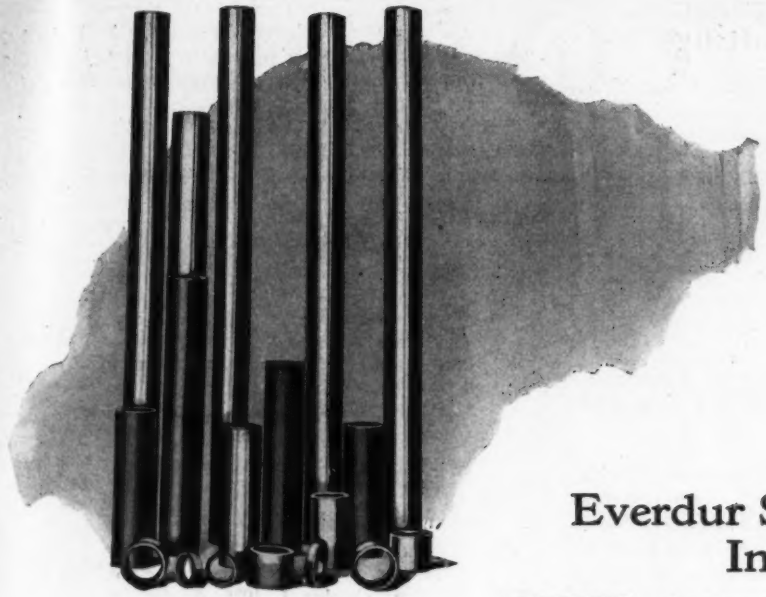
Lambertville, N. J.—The Perseverence Paper Mills, Inc., has been in corporated with a capital of $100,000, to operate a local plant, for which arrangements are being perfected. The incorporators are John F. O'Brien, John J. Tobin and Irwin Dietrich. The company is represented by C. W. Van Artsdalen, Land Title Building, Philadelphia, Pa.

Financial

Chicago, Ill.—The Miller Fibre Products Company, 350 West Ontario street, has filed notice of increase in capital from $100,000 to $140,000, for expansion.

New York, N. Y.—The Hartig Pulp Company, 247 Park avenue, has filed notice of company dissolution under state laws.

Wilmington, Del.—The Dixie Pulp and Paper Company, care of the Corporation Service Company, Equitable Building, Wilmington, representative, recently organized with a capital of $5,000,000, has filed notice of increase in capital to $15,000,000.



"I consider my problem of combating corrosion the most serious one confronting industry today, because in its various forms corrosion destroys more wealth in a year than the total cost of the late world war"

Everdur Saves Money In the Paper Mill!

EVERDUR—the corrosion-resisting metal developed by du Pont Engineers—saves money in the paper mill because it outlasts other commercially available alloys. Its endurance under even the most trying corrosive conditions minimizes replacement costs both of material and labor and saves loss of time caused by shut-downs. Its mechanical strength, easy working qualities and relatively low cost permit its wide use.

Wherever resistance to corrosion, oxidation or abrasion is a factor in production cost or in quality of product, the far-sighted paper-mill executive specifies Everdur—and secures highly satisfactory results.

Write for detailed information concerning the chemical and physical properties of Everdur—and let du Pont Everdur engineers co-operate in the solution of your corrosion problems.

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Specify Everdur for:

- Rotary screens
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- Stock Pumps
- Fourdrinier wires
- Couch rolls
- Wire support rolls
- Press rolls
- Acid towers
- Spray nozzles

Everdur can at present be obtained in ingots, billets, sheets, rods, tubes, bolts, wire and nails. Prompt deliveries can be made from stock.

For freedom from machine failure and shut-downs; for lower costs and greater profits—insist on Everdur.

DU PONT EVERDUR
DU PONT EVERDUR METAL NO 50
NON-CORROSIVE METAL

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Patents in Foreign Countries Applied For

New York Trade Jottings

With a view of inaugurating a paper mill at Liverpool, N. S., Frank J. D. Barnjum, timber land owner, of Annapolis Royal, N. S., has been conferring with various members of the paper industry in New York.

* * *

The J. J. Murphy Paper Company, Inc., have removed to 102-104 Prince street, New York, where they have greatly increased facilities to take care of their large business. Their telephone number is unchanged, and is still Canal, 2374.

* * *

George K. Spence, President of the Technical Association of the Pulp and Paper Industry, and chief engineering chemist at all the mills of the New York and Pennsylvania Company, of Johnsonburg, Pa., was a prominent visitor to New York last week.

* * *

Martin L. Griffin, Chairman of the Committee on Training of the Technical Association of the Pulp and Paper Industry, and chemist for the Mount Hope Finishing Company, of North Dighton, Mass., has been visiting New York in the interests of his organization.

* * *

A general meeting of the newly formed Paperboard Industries Association is scheduled to be held at the Waldorf Astoria Hotel, New York, on Wednesday, November 18, and Thursday, November 19. It is planned to hold meetings of the organization every 60 days. The following meeting will be held in Chicago next January.

* * *

W. G. MacNaughton, secretary of the Technical Association of the Pulp and Paper Industry, who has been participating in a trip to Sweden, Holland, Germany and England, with a party of American and Canadian consulting engineers, plans to return to New York on the Cunard liner Berengaria, sailing from Southampton, October 17.

* * *

J. O. Williams, of Cardiff, Wales, former Swedish Consul in Newfoundland, is in New York. Mr. Williams, who is an authority on the wood pulp industry, plans to spend some time in this country with the view of discussing the possibilities of the importation of pulp wood from Europe with our leading manufacturers. He is making his headquarters at the Hotel Belmont.

* * *

The National Association of Waste Material Dealers, announces that a proposed increase in the rates of rags, waste paper and other paper making materials, less carload, from 5th to 4th class is of vital importance to the waste material industry as well as to the paper manufacturers. The same proposal was made by the Classification Committee in 1915 and the Interstate Commerce Commission at that time approved the present ratings. The time assigned for the discussion of the paper stock proposals is set for Thursday, October 15, at 10 A. M., at the room of the Official Classification Committee, 143 Liberty Street, New York.

* * *

R. S. Kellogg, secretary of the News Print Service Bureau, with headquarters at 342 Madison Avenue, New York, has been chosen chairman of the Executive Committee of five, of the American Forest Week Committee, which met at Washington, D. C., last week. The Executive Committee was chosen by the Board of Directors appointed at the same meeting, and consists of the following, in addition to Mr. Kellogg: Colonel William B. Greeley, Mrs. John Sherman, Wilson Compton, and Elbert H. Baker, E. C. Ringland was chosen Treasurer. The Board of Directors was elected as follows: Chairman, Governor Frank O. Lowden; Representing the Federal Government, W. B. Greeley; Women's Clubs, Mrs. John D. Sherman; Lumber Industry, Wilson Compton; Recreation of Wild Life, Arthur C. Ringland; Forestry Associations, O. M. Butler; State Foresters, R. Y. Stuart; Paper and Pulp Industry, R. S. Kellogg; West Coast Timber Owners, E. T. Allen; Concatenated Order of Hoo Hoo, A. J. Hager, and Newspaper Publishers, Elbert H. Baker. Mr. Beazley, of Massachusetts, was originally appointed on the Board of Directors of the Committee, did not feel that he could act on the Board, and so R. Y. Stuart, of Pennsylvania, was chosen in his place.

Buy New Sykes Gear Generating Machine

The Foote Brothers Gear and Machine Company, Chicago, has purchased from the Farrel Foundry and Machine Company, Buffalo, N. Y., a new Sykes Gear Generating Machine. Foote Brothers Gear and Machine Company will place on the market a new series of reduction units, equipped with the Sykes generated, continuous tooth, herringbone gears. The company will also publish standard sizes and prices.

Pacific Coast Paper Mills Organize

PORTLAND, Ore., October 1, 1925.—Pacific Coast Paper Mills is a recently organized concern at Bellingham, Wash. The members of the new organization are connected with the Westminster Paper Mills, Westminster, B. C. J. J. Herb is president; A. D. Bowen, vice-president and Elmer Herb, secretary of the concern. A factory two-stories high 76 x 120 feet will be built at once.

SAFETY WORK IN ONTARIO

(*Continued from page 34*)

Notes and Jottings of the Industry

P. B. Wheeler, of the Franklin Paper Company, Holyoke, Mass., was in Toronto during the past week calling upon the trade.

John Martin, of the John Martin Paper Company, Winnipeg, who is a former president of the Canadian Paper Trade Association, is spending a few days in Toronto among his friends in the trade.

S. J. Frame, secretary-treasurer of the Canadian Paper Box Manufacturers Association, has removed his office from 95 King street west to the Commonwealth building, King street east, Toronto, where he has well equipped quarters.

The Lincoln Pulp and Paper Co., Toronto, has removed its offices from the Central Assurance Building to 1402 Northern Ontario building, 330 Bay street.

R. J. Flynn, of the Buntin-Reid Company, wholesale paper dealers, Toronto, who has been ill for some time, is able to be around again. Mr. Flynn is Mayor of the neighboring town of Weston.

R. I. Finlay, of the United Paper Mills, Toronto, and president of the Canadian Paper Trade Association, has returned from a motor trip to Washington, Philadelphia and other cities. He was accompanied by Mrs. Finlay.

S. F. Duncan, treasurer of the Provincial Paper Mills, Toronto, has returned from a business trip to the plants of the company at Thorold and Mille Roches.

The Hon. James Lyons, Minister of Lands and Forests for Ontario, left recently on his annual tour of inspection of the various sections which come under his jurisdiciton in connection with northern development work. It is expected that Ontario will benefit by $25,000,000 from the impending sale of nearly 9,000 square miles of timber areas.

It is expected that the news print plant at Thorold, Ont., which will be operated by the Beaver Company, Limited, will be producing about the middle of November. The capacity of the plant will be 60 to 70 tons a day and the machine being installed is a 166-inch made by Pusy and Lyons Company, of Wilmington, Del.

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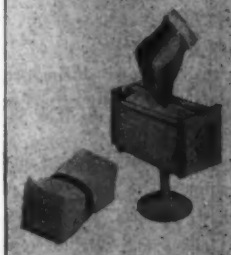
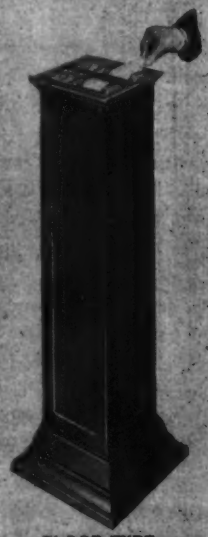


TABLE TYPE DISPENSER

A PACKAGE FOR ALL OCCASIONS



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Announcement

Hy-G Paper Napkins and Dispensers offer the solution to the unsanitary and wasteful use of paper napkins.

Hy-G Products are in a class by themselves.

The ECONOMY of HY-G PRODUCTS counteracts the lowest priced paper napkins, which in every shape or fold in the crude manner they are served, are always *wasteful* to the extent of 50%.

Over seventy distributors throughout the country command ever increasing sales and handsome profits on Hy-G Products because of their exceptional merits.

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"Won By One Never Loose"
Saves 50% Waste
Plus Highest Quality

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PAPER TRADE JOURNAL
ESTABLISHED 1872

With Which Is Combined

PAPER

The Magazine of the Paper Industry

HENRY J. BERGER, Editor

Member A. B. C. Audit Bureau of Circulations

Vol. LXXXI New York, October 8, 1925 No. 15

PAPER EXPORTS DECREASE

Exports of paper and paper products from the United States during the month of August were valued at $1,947,646, a decrease of 5 per cent under the July exports, and of 9 per cent in comparison with August of last, according to the Paper Division of the Department of Commerce discussing the imports and exports of paper for August.

The principal decreases in comparison with July, as shown in exports of book paper, surface coated paper, boxboard, sheathing and building paper, wall board of paper or pulp, wall paper, boxes and carbons, carbon paper, and other paper and paper products. These losses are offset to some extent by increased exports of other classes of paper, principally newsprint, greaseproof and waterproof paper, papeteries, other writing paper, paper bags, and cash register and adding machine paper.

Exports of newsprint, after a sharp drop in July to 1,936,000 pounds, rose again in August to 3,116,000 pounds. These shipments also exceed those for August, 1924. Other important increases over August, 1924, are noted in kraft wrapping paper, toilet paper, bristols and bristol boards, sheathing and building paper, paper bags, boxes and cartons, and cash register and adding machine paper. The most notable decreases under August, 1924, is found in exports of other paper board and strawboard, including boxboard, which dropped from 7,774,781, pounds in 1924 to 4,445,493 pounds in August, 1925. Shipments of papeteries, writing paper, cigarette paper, photographic paper, and envelopes, which show increases over the month of July, are still below those of the same month last year.

Shipments abroad of paper base stock during August totaled 8,180 tons, valued at $476,659, an increase in quantity of only 8 per cent but an increase in value of 32 per cent over the August, 1924, exports. These exports are 2,563 tons less than those for the month of July, 1925. Nearly 67 per cent of the items listed under this classification consisted of rags and other paper stock, 23 per cent sulphite wood pulp and the balance soda and other wood pulp.

Imports of paper and board into the United States during August reached a total of $9,498,805, representing a decrease of 3 per cent under July imports, but an increase of 3 per cent over August, 1924, receipts. The bulk of these imports consisted as usual of standard newsprint, receipts of which show a decrease of 7 per cent as compared with the same month last year and 14 per cent as compared with July. Imports of surface-coated paper pulp boards and other paper boards, cigarette paper, paper boxes and decalcomania also were greater than during the same month last year, but all other classes show decreases. The most notable increase in imports is that of cigarette paper, books and covers, which rose from 875,344 pounds in July, 1925, to 2,797,850 pounds in August. Receipts of this class of paper during August, 1924, amounted to only 659 729 pounds. Practically all of this class of paper comes from France.

Imports of wood pulp and waste for papermaking during August were valued at $8,649,217, and imports of pulp wood at $1,895,844, being only slightly higher than imports of these two classes during the preceding July. Unbleached sulphite represents the principal class of paper base stock imported, representing 29 per cent of the total August imports, followed by mechanical groundwood, 17 per cent, kraft pulp 17 per cent, rags for paper stock 15 per cent, and sulphite bleached 14 per cent.

DISTRESS MERCHANDISE DUMPING

In considering the growing problem of disposing of the stock of bankrupts, J. H. Tregoe, executive manager of the National Association of Credit Men has referred to distress merchandise as the multiplying cancerous growth of business. "Our merchants," says Mr. Tregoe, "and particularly our credit departments have not begun to realize the costs and disarrangements brought about by dumping large amounts of distress merchandise on unprepared markets.

"In the liquidation of insolvent estates through friendly process and through bankruptcy the main question seems to be how merchandise can be disposed of to the best advantage from the creditors' viewpoint. It sometimes happens that a business enterprise in an insolvent or embarrassed condition is continued under the supervision of creditors. Merchandise is bought and sold and with no thought of how the liquidation of this particular enterprise and the handling of distress merchandise is affecting the business of the community.

"Through the assistance of the adjustment bureaus of the National Association of Credit Men, I traced last year, the movements of several million dollars of distress merchandise. But I could not find in any single instance where the disposal of this merchandise was controlled by any other motive than that of realizing the most for it and with no protection in its movements to the merchants who are striving to make a living by selling goods on fair terms and paying for them according to contract.

"The distress merchandise problem must receive a more generous share of our critical study and be subjected in its control to more systematic handling than has up to the present time been generally the case. A creditor may fare better in an insolvent case by having the merchandise handled to the best possible advantage, but this same creditor may be sacrificing business and causing the loss of some other account through the stifling of competition that the sales of the merchandise have brought about.

"This is one of the problems upon which we must throw the

searchlight of a most critical investigation. It is one of the occasions of high costs in merchandising, and we cannot hope to control costs without the control of every leak. Not until recently did this subject come to me with the full force of its importance, but I now realize how uneconomic we were as a rule in the handling of distress merchandise. I am beginning to feel that where the merchandise is sold after the liquidation of an insolvent estate is just as important as the price obtained for it. If it is going into a community where it might serve to stifle legitimate merchandise or to make legitimate merchandising more difficult, then it were better to take a little less for the merchandise and have it go where its competition will not react unprofitable on other creditor merchants.

"It would be well for business to arouse a deep interest in this subject. It is an old, but, in a sense, a new problem; it has never received the study that it deserves on the part of sales and credit departments. Wherever costs or merchandising are under study, this subject must be analyzed and closely scrutinized, else one of the causes of high costs will have been neglected. It is clearly a credit problem because unfair competition makes legitimate merchandising difficult and increases the dangers of credit liquidations."

Eddy Paper Co. Case Reversed

KALAMAZOO, Mich., October 3, 1925.—A decision of the greatest interest to the hundreds of holders of preferred and common stock in the Eddy Paper Company of Michigan has just been handed down by the Supreme Court of this state. By unanimous verdict the case of John C. Maxwell and others vs. The Eddy Paper Company of Michigan is completely reversed and the plaintiffs are granted the relief asked.

The case was started in April, 1923, being the outcome of the sale of the Eddy Paper Company of Michigan to the Eddy Paper Corporation of Illinois and the adoption of a resolution authorizing the transfer of all stockholdings in the original company to the Illinois corporation. This resolution provided that in the transfer and issuance of new shares that each share of preferred stock should rank on a basis of three to one for each share of common stock in the proposed distribution of Eddy Corporation stock.

The plaintiffs, represented by T. J. Cavanaugh and David Anderson of Paw Paw, Claude S. Carney, of Kalamazoo appearing as intervening plaintiff in the case, entered objections on the ground that the statutes of Michigan state that in the dissolution, sale or termination of any corporation that the claims of the preferred stockholders must first be satisfied and then, if any assets remain, they shall be divided among the common stockholders.

The case was tried in the St. Joseph county circuit court before Judge C. Johnson. His decision, handed down in the fall of 1924, was favorable to the defendants. An appeal was instantly taken.

Proposal to Purchase Bayless Pulp Co.

MONTREAL, Que., September 28, 1925.—Subject to investigation of a statement made by the vendors, the Mead Investment Corporation have made a tentative agreement to purchase the Canadian assets of the Bayless Pulp Company. They have up to November 15 to complete their investigation and decide whether to carry the deal through.

The Canadian assets of the Bayless Company consist of the St. Anne Pulp and Lumber Company and the Beaupre Pulp and Lumber Company, and if the sale goes through it means that a new pulp mill, to cost between $3,000,000 and $5,000,000, will be constructed at Beaupre, for the latter place has been determined upon as the location of the new mill in the event of the deal being concluded.

The plant is just across the Ste. Anne River from the Ste. Anne and Beaupre Pulp and Lumber Companies.

Dr. Baker Speaks at Escanaba

[FROM OUR REGULAR CORRESPONDENT]

ESCANABA, Mich., October 5, 1925.—With but 2 per cent of the original pine forests of the Lake States remaining and with 15,000,000 acres of practically idle forest land in the state, the question as to where Michigan's industries and population are going with the disappearance of her forests, was discussed by Dr. Hugh P. Baker, Executive Secretary of the American Paper and Pulp Association, at the luncheon of the Rotary Club of Escanaba today.

"Michigan in 1890 produced more than 4,000,000,000 board feet of lumber and ranked first among the lumber producing states of the Union. In 1920 the state produced only a little more than 700,000,000 board feet and ranked 16th in lumber production. The state now imports approximately 80 per cent of her wood needs, paying a premium of nearly $20,000,000 a year in freight on wood which the state could be producing from its idle forest lands," asserted Dr. Baker, himself a graduate of the Michigan State College and formerly in charge of Forestry Departments at the Iowa and Penn State Colleges, and Dean of the New York State College of Forestry at Syracuse University.

"Forestry, like agriculture, is an economic problem and will be practiced only as it pays to produce wood as a crop from the soil. For years forestry has been in a sentimental stage but now with the cost of a cord of pulp wood exceeding the cost of production of that cord we have reached the period of economic development, and we can afford to grow wood as a crop. Before forestry can become a great industry in the state, however, the people must awaken to the fact that the forests must be effectively protected from fire and put under practical business management.

"It is time that Michigan faces squarely the question of idle and unproductive land as over against increasing taxation and increasing cost of government. An idle acre is as unproductive as an idle man. Why leave idle an empire of forest land in the state, capable of contributing largely to the support of the state, and go deeper each year into the pockets of the citizens for taxes? The per capita cost of state government in Michigan increased from $5.66 in 1917 to $24.07 in 1922. The net indebtedness of the state increased from $2.14 per capita in 1914 to $12.80 per capita for 1922. Along with these items should be put the increasing burden of tax exempt property. Is it not simply good business for the state to expect idle forest lands, capable of being made productive, to give a return to the state, comparable in part with the return received from agricultural lands?

"Every acre in Michigan should be utilized to the financial profit of its owner, whether an individual, the community, or the state as a whole."

G. D. Robinson Leaves American Writing

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., October 5, 1925.—George D. Robinson, one of thte city's best skilled papermakers, this past week severed his connection as superintendent of the Parsons Division of the American Writing Paper Company and will assume a new connection within a short time. Mr. Robinson who came to Holyoke in 1918 has had a wide and successful experience with high grade paper mills. He first came to Holyoke as superintendent of the Nos. 1 and 3 mills of the Riverside Division and was sent to the Parsons Division about a year and a half ago. Previous to coming to Holyoke he had been with the Byron Weston Paper Company of Dalton as superintendent, with the Mt. Holly Paper Company of Mt. Holly Springs, Penn., and the Whiting Paper Company at North Wilbraham. The employees of the Parsons Division presented him with a purse of gold on his retirement and gave him voice to their regrets at his leaving. He was held in high esteem by his fellow workers. William Mathieson superintendent of the Beebe & Holbrook Division will take Mr. Robinson's place at the Parsons Division.

Soda Ash Bicarbonate of Soda Caustic Soda
Modified Soda Special Alkali

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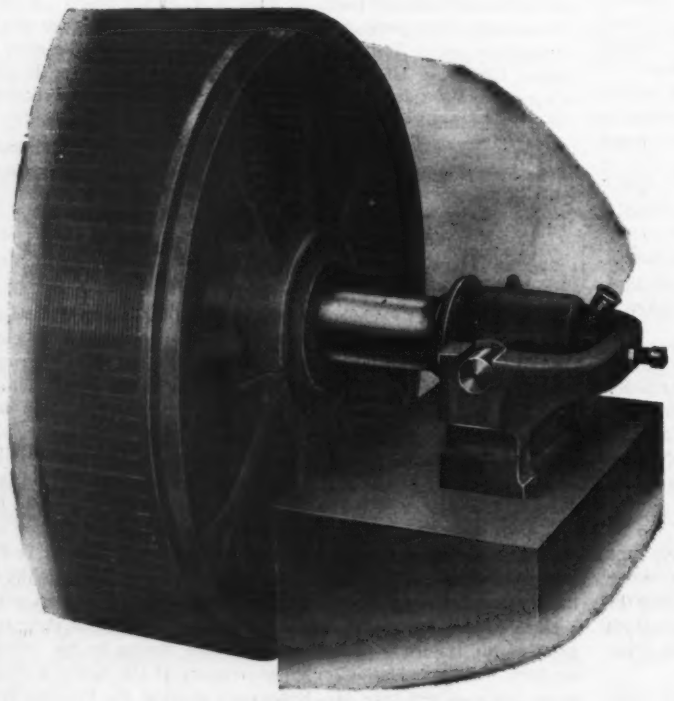
QUALITY

The additional value in Diamond Alkalies that maintains them as the Standard.

DIAMOND ALKALI COMPANY
PITTSBURGH, PA.



Just what you are looking for. Anti-friction cylinder mold bearing that was never known to give any trouble.

Precision built Cylinder Molds to meet exacting demands.

Keep your product up to quality and capacity by using our Paper Machines and equipment.

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Section of the

Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G. MacNAUGHTON, Secretary

Testing Method for Degree of Sizing Paper*

By F. T. Carson, of the Bureau of Standards

A comparative study has been completed of five of the best known methods for determining degree of sizing. These methods are (1) Ink Flotation, (2) Electrolytic or conductivity (two types), (3) Stöckigt, (4) Curl, (5) Bureau of Standards new Indicator Method.

This investigation is limited to the consideration of degree of interval sizing or hindrance to the wetting of paper from the surface inward, as none of the above methods are adapted to the measurement of degree of surface sizing, or resistance to lateral absorption and feathering of aqueous fluids such as ink. It is urged that *degree of internal sizing* and *degree of surface sizing* be recognized as distinct properties of paper. This is justified by the anisotropic structure of paper and by the common observation that paper at times may be satisfactorily sized with reference to penetration but poorly sized with reference to spreading on the surface, and vice versa.

Paper is sized internally chiefly by incorporating water resistant materials (rosin principally) in the sheet. The only substance in common with most of the methods for testing degree of sizing is the water of the various testing solutions, from which fact it must be inferred that the rate of penetration of water is the property which a test of degree of interval sizing is designed to measure.

That most of the twenty odd methods which have been proposed fail in this design is traceable to the subtle influence of selective adsorption from solution. Every one is familiar with the manner in which ink is separated into its several constituents by a strip of blotting paper or filter paper hung with one end dipping into the ink. Several distinct zones are formed; water at the top, dye next below and a heavy precipitate of colloidal material below that. The same sort of thing happens when ink or any other solution containing positive ions or positive colloids is applied to paper in testing its degree of sizing. But in this case it cannot readily be observed and is usually neglected.

This influence is quite fatal to the Ink Flotation test as a means of measuring degree of internal sizing.

The Stöckigt method appears to be the best of the type employing interacting solutions to opposite sides of the sheet. The reaction is extremely sensitive and the ammonium thiocyanate is as a rule adsorbed but slightly. The ferric chloride, however, is strongly adsorbed. This method at times is rather deceiving.

The Electrolytic method, which at first appeared so hopeful of solving the problem of many decades, unfortunately involves an additional fallacy which makes its experimental data as completely allusory at times as they are helpful at otbers. The effect of selective adsorption is probably small with the use of potassium chloride, but the insulating effect of entrapped air leads to absurdly high values in most papers.

In both of the other two methods (which were developed at the Bureau of Standards) the test specimen is floated on water and no solutions or involved processes are required.

The Curl method depends upon the differential expansion of paper as a result of swelling as water penetrates from one side.

The new Bureau of Standards method detects transuded water by means of an indicator not in solution.

The experimental data from 63 samples of paper appear to justify the following conclusions.

(1) The most probable relative degrees of internal sizing of the various samples tested are best represented by the data of the Bureau of Standards Indicator method.

(2) The agreement between the Indicator method and the Curl method is in general satisfactory.

(3) The Stöckigt method is fairly dependable, but there is attached an element of uncertainty which at times may involve gross error.

(4) Neither the Electrolytic method nor the Ink Flotation method corroborates any other method. Nor can these methods be depended upon to give consistent or reasonable comparative data even on the same kind of paper.

A report of this investigation in detail will appear as a technologic paper of the Bureau of Standards.

* Abstract of a discussion to be presented at the fall meeting of the Technical Association of the Pulp and Paper Industry at Kalamazoo, Mich., Oct. 14-15, 1925.

Union Bag & Paper Changes at Hudson Falls

[FROM OUR REGULAR CORRESPONDENT]

Montreal, Que., October 5, 1925.—It is announced here that the Union Bag and Paper Corporation will curtail production at its plant at Hudson Falls, N. Y., and transfer part of its plant to the mill of the St. Maurice Paper Company, at Cap Madeleine, Three Rivers, Que., in which company it owns a controlling interest. It appears, according to a statement of an officer of the company, that the 96-inch cylinder machine at the Allen Paper Mill is to be dismantled and shipped to the Canadian mill, where it will be operated. All employees on the machine will be given the opportunity to have employment at Cap Madeleine, Three Rivers. Several have decided to go. Others will remain in town and seek employment elsewhere. The removal of the machine to Three Rivers is made in the interest of efficiency, it was said. The official said, perhaps a large machine will be installed in place of the one being removed. He said the matter would be considered by the directors and officers in 1925.

A Proposal for Reducing the Contamination of Streams by Strawboard Mills *

By John D. Rue[1] and Francis G. Rawling[2]

The amount and character of the waste that strawboard mills are dumping into the streams are causing much concern to the authorities who are charged with responsibility for the public health and welfare. Fortunately some of the authorities are inclined to take a broad-minded view of the situation and are coming to realize that the eradication of any dangers which may be arising from this cause can best be accomplished by cooperation with the strawboard industry in the application of sound economic and scientific principles and processes, and that while the development of proper remedies can be encouraged and facilitated by wise legislation they cannot be legislated into being.

The authors recognize that much can be done toward reduction of the waste even in the case of the lime process by more effective handling of the water in the mill, but the real solution of the waste problem appears to lie in some more radical modification of existing practices. In this paper there are offered some suggestions, growing out of investigations conducted at the Forest Products Laboratory for another purpose, which may point the way to at least one method of attacking the problem.

Rue and Monsson[3] have described a new process for cooking straw for strawboard which differs from the process commonly used in the mills chiefly in its use of a mixture of Na_2CO_3 and Na_2SO_3 instead of lime. The substitution of sodium salts presents the possibility of introducing a recovery system which would not only permit of the reclamation of large proportions of the chemicals but would effect, through incineration, practically complete elimination of stream pollution caused by the soluble organic matter.

Difficulties of Disposing of the Waste from the Lime Process

In the lime process it has been found impracticable to dispose of the waste except by depositing it in the streams or impounding it in settling basins, although attempts have been made to separate the solids by means of mechanical filtering or settling devices or to dispose of them with the aid of bacteria. All of the practices except the first have been followed to only a minor extent and are possessed of limitations which render their extension undesirable and impracticable. Most of the waste now finds its way into the streams. It consists for the most part of matter, chiefly organic, removed from the straw but in addition contains excess lime, insoluble lime salts, and fiber. The most obvious method of eliminating the whole source of contamination is to evaporate the water and burn the residue, recovering whatever fuel value is possible in the process.

In the way of this solution of the problem, however, there stand several great obstacles, and the greatest obstacle of all is that the amount of water necessarily associated with lime wastes is so large that economical evaporation is out of the question. The washing of insoluble material from the pulp requires larger amounts of water than does the removal of soluble components. To be sure, in most mills more water is being used than is absolutely necessary, and the exercise of greater care in the use and reuse of water might easily result in reducing the volume of waste to one-half its present volume. In accomplishing that result some of the fiber now going into the stream could be recovered and would undoubtedly constitute a source of revenue to the mill. The other ingredients, however, would still go into the stream. It is now quite common to find mills using 40,000 gallons per ton of product, but it might be possible to reduce the consumption to 20,000 gallons and perhaps a little less. A much greater reduction in volume is essential, however, to admit of evaporation. Furthermore, the presence of lime and lime salts constitutes a fruitful source of trouble in the evaporation by reason of the coating or "scaling" of the tubes.

The New Process

The new process will, it is believed, obviate many of the difficulties of recovery and waste disposal inherent in the lime process. It may be briefly described as follows: The straw is prepared and charged in the usual rotary digesters. Instead of lime the liquor contains, for each 100 pounds of straw (dry weight), 7½ pounds of soda ash and 1½ pounds of sodium sulphite. Other proportions may be used, but these have been found to be effective. The temperature and pressure will be governed by the limitations of the equipment. Cooking for ten hours at 40 pounds gauge pressure has on a commercial scale resulted in a pulp superior in strength to the lime-cooked product. The method of handling the straw from the digester to the finished board is the same as that followed in the older process.

The preparation of the liquor for the new process necessitates the installation of some special equipment—which, however, is simple and inexpensive. The raw chemicals are soda ash and sulphur. The liquor is made by burning the sulphur and absorbing the SO_2 in a solution of soda ash until the required amount of sulphite has been formed.

Elimination of Pollution Through Treatment of the Spent Liquors

From the economic standpoint recovery of the chemicals from the spent liquor is desirable, although possibly not always necessary. If, however, the new process is to constitute a solution for stream pollution, chemical recovery will doubtless be imperative.

Owing to the relatively low proportion of chemical to straw used in the cooking process, the spent liquors, including the wash waters, will have a lower concentration as regards sodium salts than the liquor obtained from a soda pulp mill. Assuming the use of 20 gallons of total water for each 100 pounds of straw at the commencement of the cook, the net condensation of steam used for cooking (provided it is dry and allowing for evaporation during blow-down) will increase that amount to 25 gallons. With an efficient washing system the further dilution should not bring the total volume to more than 40 gallons per 100 pounds of straw (1,200 gallons per ton of pulp). Assuming that 80 per cent of the chemicals are recovered in the spent liquors after the washing operation, the 40 gallons will contain about 7 pounds of sodium salts. The concentration of liquor will then be 0.18 pounds of salts per gallon, as compared with about 0.5 pounds per gallon of spent liquor from the soda wood pulp process, and the amount of water associated with each pound of salts will be 3½ times as great. While the use, where practicable, of spent liquor instead of water in the cooking operation will increase the concentration of salts, somewhat larger quantities of water must nevertheless be evaporated than in the soda wood pulp process.

There should be little difficulty, however, in burning the concentrated spent liquors. The proportion of organic to inorganic matter is greater[4] than in the spent liquor from the soda process, in which the operation of a recovery plant offers no serious difficulties.

Objection may be raised that experience with the recovery process in mills cooking straw for cellulose by the soda or sulphate methods has shown that the silica dissolved from the straw fluxes

* To be presented at the Fall Convention of the Technical Association of the Pulp and Paper Industry, Kalamazoo, Mich., Oct. 14-15, 1925.

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[3] John D. Rue and William H. Monsson. "A New Method of Cooking Straw for Strawboard." (submitted for publication).

with the soda in the incinerator and thus retards the combustion and shortens the life of the incinerator lining; and that the presence of silica in the liquor interferes with the settling of the sludge in the causticizing operation. The objection does not apply to the process under consideration, however, for in the first place causticizing is not necessary, since the chemical extracted from the incinerator ash would be Na_2CO_3 and would be used as such, and, secondly, Rue and Monsson[5] have shown that only about one-fourth the silica in the straw is removed, whereas in the preparation of straw cellulose by alkaline processes nearly the entire amount is removed. Hence, owing to the small amount of silica dissolved, the loss of soda due to the formation of silicates will be slight.

The presence of some sulphur compounds in the spent liquor will tend to produce odors on burning, but not much stronger than those encountered in recovery plants of some soda pulp mills—especially soda mills in which the incinerators are heated by means of coal or coke of high sulphur content, where a part of the sulphur in the fuel combines with sodium salts in the incinerator ash, and forms during incineration in subsequent cycles odoriferous substances.

Cost of the New Process

As pointed out by Rue and Monsson[5] the new process for cooking straw for strawboard when operated without a recovery system should cost not to exceed $3.13 per ton of pulp more than the lime process and probably considerably less. It is important now to consider what effect the introduction of a recovery system will have upon cost.

As already stated, the concentrated spent liquor from the soda wood pulp process leaving the evaporators contains approximately 23 pounds of sodium salts and 3.5 pounds of organic matter per gallon. For each 100 tons of straw cooked by the new process about 80,000 gallons of liquor will go to the evaporators. The liquor will contain around 7 tons of sodium carbonate and 16 tons of organic matter at a concentration of approximately 0.18 pounds and 0.40 pounds per gallon, respectively. To bring the liquor to the same concentration as the soda wood pulp spent liquor it will be necessary to remove by evaporation 74,000 gallons of water. Assuming an efficiency of 24 pounds of water per pound of coal, the work of evaporation will require 26,000 pounds of coal costing, at $4.00 per ton, $52.00—that is, $0.52 per ton of straw or $0.78 per ton of board. If low-pressure exhaust steam is available, this cost can be considerably lowered.

Since in the spent liquor by the new process the ratio of organic to inorganic matter is even greater than in the case of the soda wood pulp spent liquor, and since very little outside fuel is required to burn the latter, it may be concluded that there will be no need for a greater amount of fuel in the incineration of the concentrated straw liquor when concentrated to the degree indicated above, than is required in the soda process. The incinerator ash can be bleached in the same manner in both processes.

It is assumed that 80 per cent, or 210 pounds, of sodium carbonate can be removed from the spent liquors from each ton of strawboard. A fair estimate of the cost involved can be reached if to the normal cost of recovering that quantity of chemical in the soda process there is added the cost of the additional evaporation required in the straw process. The former may be assumed to be $0.50 per 100 pounds of sodium carbonate, or $1.05 for the 210 pounds, which when added to the $0.78 required to evaporate the extra quantity of water in the straw process brings the total cost to $1.83 per ton of board—$1.53 less than the $3.36 which the same amount of soda ash would cost. The latter cost is based upon an estimate of $1.60 per 100 pounds of soda ash f.o.b. mill.

[4] In the new process for each 100 pounds of straw there are used 7½ pounds Na_2CO_3 and 1½ pounds of Na_2SO_4, which, calculated to the equivalent of Na_2CO_3, totals 8.8 pounds. From the 100 pounds of straw there are dissolved some 3 pounds of inorganic and at least 20 pounds of organic material. The ratio of organic to inorganic is therefore 20 to 11.8, or 1.71. In the soda wood pulp process, for each 100 pounds of wood there are used 25 pounds of NaOH, equivalent to 33 pounds of Na_2CO_3, and there are dissolved about 50 pounds of organic with a negligible amount of inorganic matter. Thus the ratio of organic to inorganic substance in the soda spent liquor is 50 to 33, or 1.51.

[5] *Loc. cit.*

While the saving thus involved in the installation of a recovery plant will be small, it will reduce the cost of new process strawboard (based on the assumptions made) to an amount only $1.60 greater than the cost of the lime product. Further reductions in cost can probably be effected by the following means:

1. By obtaining yields higher than the 66 2/3 per cent assumed in the calculations. Over 70 per cent yields of a satisfactory product were obtained under experimental condition and can without doubt be easily duplicated in commercial practice. An increase of yield from 66 2/3 per cent to 75 per cent means a saving for each ton of pulp of 0.17 ton of straw which, at $12.00 per ton, costs $2.04. Further reduction in cost would be involved in the decreased labor required for charging the digester and in the distribution of overhead over a greater production.

2. The spent liquor can be reduced in volume by repeated reuse in making up cooking liquor, thus reducing the cost of evaporation.

The authors recommend that interested mills cooperate in making a carefully planned and supervised commercial demonstration of the suggested process and in carrying on the investigations which will be found necessary in connection with such a demonstration in order that the process may be brought to a fully satisfactory state of development.

It is believed that the gravity of the stream pollution question fully warrants the expenditure by the mills of the funds which such a program would require, and that if the process fulfills its promise of being a satisfactory answer to the question the additional cost of the product will not be prohibitive, especially in view of the demonstrated superiority of the strawboard produced.

West Jersey Paper Mfg. Co. Makes Latex Papers

CAMDEN, N. J., October 1, 1925.—The West Jersey Paper Manufacturing Company, working under a license agreement for the use of patents covering the production of latex treated papers owned and controlled by the United States Rubber Company and in co-operation with its development department has been experimenting for some months in a commercial way in the production of several special grades of paper containing appreciable amount of rubber.

Recently several sample runs of these papers were subjected to severe practical use and a twenty-five ton order has just been completed, representing the first carload order ever placed for latex treated paper in the United States.

The results that have been obtained in a latex content paper by the West Jersey Paper Manufacturing Company definitely disproved the belief by many in the paper trade and some technical organizations, that the application of rubber latex was not practical in the manufacture of paper.

This particular order is for the D. J. Molloy Company, Chicago, who will have the exclusive use of latex content papers for book covers and kindred products as a base material in their new MoCo stock. This organization is well-known as manufacturers of Molloy-Made covers, and has recently perfected MoCo to give the paper cover field the same quality product that they have in the past made for the more permanent bindings. The order is sold to them through the Seaman Paper Company of Chicago.

J. H. Manning Paper Co. Buys Property

[FROM OUR REGULAR CORRESPONDENT]

GREEN ISLAND, N. Y., October 5, 1925.—The J. H. Manning Paper Company has purchased the building on the Hudson River front in Green Island formerly used as a hall by the Green Island Lodge of Odd Fellows. Included in the purchase is a small section of land along the waterfront. The paper company will hold the land for its riparian rights that they may have egress to the river if the development of the Barge Canal should bring a channel to the Green Island side of the river. The purchase price involved in the transaction was not made public.

Training in the Pulp and Paper Industry

By Martin L. Griffin, Chairman Committee on Training

The Committee on Training in the Industry, of the Technical Association of the Pulp and Paper Industry, wishes to announce that the general plan of providing educational facilities to those employed in the pulp and paper industry is, first, to provide correspondence courses for all; second, to offer organized class instruction, and, third, group instruction, a combination of correspondence and class work.

The foundation of this work will be the set of text books published by the Joint Vocational Education Committee, supplemented with lectures by men intimately connected with their subjects.

There are at present three sources of study by correspondence and classes in the United States and Canada, and it is the purpose of the committee to encourage and co-operate with existing facilities, and extend them, through co-operation with state institutions and individual mills and communities.

It will be the further purpose of the committee to aid in developing a well trained available personnel to carry on the class instruction of part time students in manufacturing centers.

The New York State College of Forestry at Syracuse is the only institution devoted exclusively to training men through all the stages of paper making over a four years' course leading to a degree. We may expect this institution will furnish many men to carry forward this work of class instruction in the future. C. E. Libby, professor of pulp and paper manufacture of this college, is a member of the committee.

The Massachusetts Department of Education, Division of University Extension, of which Dr. James A. Moyer, State House, Boston, Mass., is director, also a member of the committee, is now offering the latest revised courses in pulp and paper manufacture, as follows:

Enrollment and Methods of Conducting Paper and Pulp Correspondence Courses

Correspondence courses may be started at any time. The first step to be taken by a student wishing to enroll is to fill out and send to the division an application blank accompanied by the enrollment charge. After enrollment, the student will receive the first two lessons with instructions for study and preparation of lesson reports. Each lesson report when completed is to be sent to the instructor, by whom it will be corrected and returned to the student with written comments. A student is urged to ask questions freely on any problems arising in the work which he is doing. No entrance examinations are given but each application is passed upon individually and no one is admitted to a course until the division is satisfied that he is sufficiently prepared to carry on the work required.

Enrollment in Pulp and Paper Classes

Classes are usually organized through the efforts of an interested individual or organization after definite arrangements with the divisions as to enrollments, place of meeting, and the like, have been made. The first step is to secure class registration blanks, have them filled out and sent to the division, accompanied by the proper registration charges. A class can be organized only in Massachusetts, but group instruction, which is a combination of correspondence and class methods, is offered in any state or in Canada. Group instruction is explained in the following paragraph.

Enrollment in Correspondence Study Groups

Where several students living in one community are registered in the same course, it is possible for them to unite for mutual assistance and study.

To establish a correspondence study group, ten or more students enroll in the same course and begin their instruction together. One member acts as secretary. They meet regularly, preferably once a week, for the discussion of lessons and for mutual helpfulness. If there is an average attendance of eight members, arrangements can usually be made with the division to have an instructor meet the group once a month at their regular place of meeting. Charges per student are the same as in the case of regular correspondence instruction.

Manufacture of Pulp, Course I

This first course is designed to familiarize the student with existing methods of handling pulpwood from the time it enters the mill until it is turned over as blocks, for the manufacture of mechanical pulp, or as chips for the manufacture of chemical pulp. It contains much information in regard to the physical structure and chemical composition of wood as it is required as a basis for explaining the processes of making pulp. Further, this course describes the process of making mechanical pulp, which is the first of the four kinds to be studied. (Eight assignments.)

Topics Treated.—Important fiber producing plants other than wood; delivering wood to the mill; special conveyors for hauling logs to cutters and slashers; barking the wood; storing wood; chipping and rechipping; properties and treatment of the wood; history and description of the process of making mechanical pulp; physical properties of the pulp; grinders and grinding; grinder stones and methods of handling; layout and operation of mechanical pulp mill; power requirements and production; grinding processes and pressure system.

Manufacture of Pulp, Course II

This course considers the sulphite, soda, and sulphate methods in pulping and explains in considerable detail the differences in the cooking processes for each grade of pulp from the time the cooking liquor is prepared until the pulp is washed. Considerable attention is given to the reclaiming of chemicals and the utilization of waste liquors. (Eight assignments.)

Topics Treated—Preparation of cooking liquors, and the various materials required; types of cookers and digesters; evaporators; layout of cooking room; routine of cooking operation; pulp washing; yield and quality of pulp; recovery of by-products.

Manufacture of Pulp, Course III

This course deals with the treatment of pulp from the time it is taken from the grinder pits, blow pits, washers or diffusers until it is delivered to the paper mills or cars, ready for shipment. An important section of this course is the one on *Refining* and *Testing*. Paper manufacturers are very particular in their requirements for pulp of a uniform quality. The only way to know whether a product is according to sample or up to standard is by applying certain tests. It is the purpose of this course to explain carefully how these tests are applied. (Eight assignments.)

Topics Treated—Types of screens; treatment of pulp after screening; regulating consistency; operations of the Save-All machine; refining of pulp; types of refiners; testing of pulp; sampling; manufacture of bleach; bleaching operations; analysis of bleach and bleach liquor.

Manufacture of Paper, Course I

This is the first of a series of four courses devoted to the manufacture of paper. Beginning with instruction on the preparation of rags, fibres, and waste papers, the course covers in detail the operations through which pulp passes until it is ready to be taken to the paper making machines. For economic reasons it is becoming more necessary each year to conserve the natural supply of raw material used in the paper making industry. This course describes in detail the means already taken to relieve the ever increasing demand for pulp stock, and mentions still

other ways and materials that might some day be used profitably. (Eight assignments.)

TOPICS TREATED.—*Preparation of Rag and Other Fibres:* Sources of supply; classification of rags; treatment of rags before cooking; cooking of rags; bleaching, draining and losses; hemp, jute, seed-hull, fiber, esparto, straw pulp.

Treatment of Waste Papers: Use and value of waste papers; methods of recovery; mill sorting; dusting the papers; paper shredders; purchasing paper stock; cooking processes; treatment of cooked paper stock.

Beating and Refining: Types of beaters; care of beaters; beater-room equipment; condition and handling of pulps and half-stuff; theory of beating; Jordan refining engine; special types of refining engines.

Loading and Engine Sizing: Fillers; sources and character of fillers; analyses of fillers; engine sizing; materials used in sizing; the sizing process.

Coloring: Classification of coloring materials; source and manufacture of aniline dyes; standardization of dyestuffs; testing of dyestuffs; color storage and preparation rooms; details of coloring process; color formulas; calender and other methods of coloring.

Manufacture of Paper, Course II

This course is limited to the paper machine, considering its various parts and operations. It should be of special interest to machine tenders and operatives who expect to enter this phase of paper making. The objective of the course is to familiarize the student with the various parts of the machine and their proper use and care. (Eight assignments.)

TOPICS TREATED.—*Auxiliary Equipment for Paper Making:* Stuff chests; stuff pumps; regulating boxes; save-alls; rifflers or sand traps; screens.

Modern Paper Machines: Fourdrinier parts of paper machine; details of Fourdrinier part; flow box and apron; the deckle; the slices; the shake; Fourdrinier rolls; suction boxes; guide rolls; the dandy roll; couch rolls; suction rolls; stretch rolls; elevating the Fourdrinier wire; management of the Fourdrinier part; putting on new wire; cleaning the wire; operating details and troubles; wire, apron cloth, and slice troubles; stock troubles; couch-roll jacket; suction couch-rolls and suction boxes; the showers.

Presses: De-watering the paper; description of press part; press housings; press-roll weights and levers; the vibrating doctor; suction press rolls; felt suction boxes; press-felt stretchers; felt whippers and showers; guide rolls and paper rolls; management and care of press part; care and treatment of felts; details of press rolls; the felt rolls; the draw.

The Dryer Part: Smoothing rolls; typical dryer part; details in dryer part; guiding the felt; stretching and tightening felts; removing air and water from dryers; operation and management of dryers; controlling the steam supply; handling dryer felt; evaporative effects.

Calenders, Reels, Slitter, etc.: Description of calenders; calender trouble; types of reels; slitters and winders; winding troubles.

Special Paper Machines: Cylinder machines; cylinder machine details; differential winder; machines for making tissue, glazed, and other papers.

The Paper Machine Drive: Basic principles; types of mechanical drives; belt action under working conditions; electric drives.

Manufacture of Paper, Course III

Although most paper is now machine made, there is still demand for hand-made paper. For some purposes it is superior to that made on machines. For excellence of the water-marking and durable construction, the hand-made paper is without rival. It is much in demand for records and documents that require considerable handling. Another section deals with tub-sizing and points out how this method differs from engine sizing. (Eight assignments.)

TOPICS TREATED.—*Hand-made papers:* Molds and deckle; felts and vats; forming sheets; drying, sizing, and finishing; water-marking.

Tub-sizing: Size materials; preparation of size; treatment of sizing materials; sizing; drying.

Paper Finishing: Preliminary finishing operations; rewinders and cutters; supercalenders; finishing loft-dried papers; plating paper; pasting operations; trimming the sheets; finishing and packing coarse papers.

Coated Papers: Preparation of color; coating operation; drying operation; finishing operation; properties of and testing of materials; coloring materials; adhesives; hand-brushing and coating formulas.

Paper Testing: Physical, miscroscopical, chemical tests; estimation of fibers.

Up to this time processes and machinery have been treated but nothing has been said of the motive power that drives this machinery, or of other mechanical contrivances that make it possible to carry on these endless operations without any great loss of time or labor. In this last course will be discussed the general equipment that is responsible for the uninterrupted flow of the product from its raw stage to the form in which we are accustomed to see or use it. (Eight assignments.)

TOPICS TREATED—*Pumps and Pumping Apparatus:* Single pumps; duplex pumps; power plunger and piston pumps; rotary pumps; centrifugal pumps; capacity of pumps; horsepower of pumps; centrifugal pump calculations; selection of pumps; pump operation.

Care and Maintenance of Electrical Equipment: Selection of motors; motor drives; troubles and remedies of induction; care and maintenance of induction motors; transformer troubles; compensator troubles.

Heating and Ventilation: General principles; application of principles in various departments such as the grinder room and machine room.

Lubrication: Its necessity; lubricants; lubricating devices.

Water: Composition and classification; characteristics of water for paper making; hard waters; mechanical treatment; chemical treatment.

This course is designed for men who have had considerable mill experience, but feel the need of further knowledge of the mathematics and other fundamental sciences used in pulp and paper manufacture. It is comprehensive and aims to give training in those subjects which have a bearing on the pulp and paper industry, namely, physics, mechanics, hydraulics, electricity, and chemistry.

Open to those who have completed elementary applied arithmetic, practical applied mathematics, and blueprint and plan reading, or the equivalent.

Each part of this course consists of ten assignments or class periods.

For further information apply to James A. Moyer, director, 217 State House, Boston, Mass.

The charges for these courses of correspondence instruction on the manufacture of pulp and paper are as follows:

For residents of Massachusetts the charge for each course is $10, which includes the text material.

For non-residents of Massachusetts, the charge for each course is $10, with an additional charge of $2 for text material. In other words, the non-resident pays $2 more for each course than the State resident. For correspondence study groups, the charge per student is the same as in the case of regular correspondence instruction.

For class instruction, the charge for each course is $3 for each person, with an additional charge of $2 for text material.

The committee feels that wherever it is possible classes and correspondence study groups should be organized.

A New Method of Cooking Straw for Strawboard*

By John D. Rue[1] and William Monsson[2]

In the preparation of pulp for strawboard the straw is usually subjected to a mild digestion with milk of lime. The chemical treatment is carried only to the extent of softening the knots sufficiently for them to yield readily to the disintegrating action of subsequent beater treatment.

One important use of the finished product is as a "filler" in egg cases, made up of strips of strawboard separating the eggs and thus preventing breakage. It has been observed that eggs packed in such manner and held in cold storage acquire an unpleasant, musty taste not attributable to decay of the eggs, a defect which has been ascribed to their contact with the strawboard and absorption of its odorous constituents. Through the generous cooperation of a group of five manufacturers of egg case fillers[3] the Laboratory was enabled to investigate the possibility of removing, or at least diminishing, this possible source of contamination of the eggs.

Preliminary tests made with a view to eliminating the odor from board produced from lime-cooked straw offered little encouragement, and attention was then turned to modifying the method of cooking. The results of the latter phase of the investigation are recorded here, because they resulted in a product not only of greatly diminished odor but also of superior physical properties.

For practical reasons it was desired to modify the existing process as little as possible. Consequently substitutes for lime were sought which, when used in existing equipment, would soften the knots of the straw without excessive reduction in the yield of product and would not impair the strength and stiffness characteristic of strawboard. Caustic soda and a mixture of caustic soda and sodium sulphide have both been used with success in the production of straw cellulose. It is stated that in commercial practice, the addition of Na_2S makes for higher yields, but its use is attended with unpleasant odors. The addition of Na_2SO_3 to caustic soda[4] also improves the yield, and without the development of unwelcome odors. The action in both cases, however, is too drastic and the yield, while satisfactory in the production of high-grade straw pulp, is too low for application to the manufacture of strawboard.

In view of these facts and because of its well-known mild action upon lignocellulose,[5] Na_2SO_3 was selected as one of the cooking chemicals. When used alone the action of Na_2SO_3 on the lignocellulose in wood gives rise to acids which have a corrosive effect upon steel digesters. Sodium carbonate, as an inexpensive mild alkali, was therefore added to the Na_2SO_3 in such proportions as were found necessary to maintain an alkaline condition. Paschke[6] has shown that Na_2CO_3 "has a very slight solvent action for lignin at low temperatures, but as the temperatures increase its solvent action also increases, so that at elevated temperatures it completely dissolves the straw lignin but does not attack the straw cellulose." At suitable temperatures, therefore, the combination of Na_2SO_3 and Na_2CO_3 was expected to exert a softening action on the straw, including the knots, without dissolving excessive amounts of either cellulose or lignin, and it was hoped that by the avoidance of high alkalinity a product of diminished odor would result. Several laboratory runs were made in order to determine the most favorable conditions of temperature, time of cooking, and proportions of chemicals.

Experimental Procedure

The baled, newly threshed wheat straw used for the preliminary experiments was typical of the supply available to strawboard mills in the early fall. The straw was charged into a horizontal rotary digester, the chemicals and water were added, and the cooking was started by the admission of live steam. The cooking conditions and yields for five selected cooks are shown in Table 1.

In the cooks numbers 5 and 6 the cooked straw was washed and beaten in an engine of the hollander type. In the case of cooks 8, 9 and 10 the cooked straw was first passed through a rod mill and then washed in a beater, the roll of which was at no time lowered. The pulp from each of the five cooks tabulated was passed through the jordan and made into board on the Laboratory's 15-inch Fourdrinier machine.

Discussion of Physical Properties of Board Developed in Experiments

There was no noticeable difference in the odor of the board made from the five cooks. In all cases it was not only fainter but also much less offensive than the characteristic smell of lime cooked straw.

Other physical properties, as determined by the usual strength tests, are shown in Table 2. The pulp from Cook 5 was raw, as was indicated by the low strength and rough shivey character of the board made from it. Further cooking would doubtless have improved the quality, but at a sacrifice of yield. The pulp from Cook 6 was reduced easily under the beater treatment and produced a board of good strength and appearance, but the yield was low. Cooks 8, 9 and 10 differed among themselves chiefly in the quantity of chemical used, the ratio of Na_2CO_3 to Na_2SO_3 and the other conditions of cooking being the same in each. Very little difference could be observed in either yield of pulp or quality of board from Cooks 8 and 10. The extra amount of chemical used in Cook 10 therefore appears to have been unnecessary. The pulp from Cook 9 was low in yield. Its dark color indicated a deficiency of chemical. Otherwise the properties of the product were good. As far as could be determined by inspection, all of the resulting boards were satisfactory as regards stiffness.

In general, then, from standpoints of yield, quality of product, and economy of chemical consumption, the conditions obtaining for Cook 8 gave the best results.

Commercial Demonstration

An opportunity was afforded by one of the cooperating mills to apply the new method of cooking on a commercial scale. Sixteen cooks were performed, in which the proportion of chemical to straw and of Na_2CO_3 to Na_2SO_3 was the same as used in Cook 8. Owing, however, to the necessity at that mill of operating at a lower temperature than that used in Cook 8, the time of the cooking was extended. The data for a single typical cook of the sixteen are shown in Table 1. In Table 3 are recorded data as to the physical properties of two board samples typical of the commercial product made during the test, as well as for two typical samples from lime-cooked straw, one made at the same mill and the other at a different mill.

The commercial board, except for the sample designated P-482, was thicker than could be obtained with the laboratory equipment, but otherwise the products were quite comparable, the physical properties shown in Table 3 indicating that the quality of the mill product made by the new process is fully equal to that of the experimental board. It is especially interesting to note that the strength of the new product made under commercial conditions is

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* To be presented at the annual Fall Convention of the Technical Association of the Pulp and Paper Industry, Kalamazoo, Mich., Oct. 14-15, 1925.

[1] In charge, Section of Pulp and Paper, Forest Products Laboratory, Forest Service, Madison, Wis.

[2] Assistant Chemist in Forest Products, Forest Products Laboratory, Forest Service, Madison, Wis.

[3] Namely, the Creamery Package Mfg. Co., Coffeyville, Kans., the Hutchinson Egg Case Filler Co., Hutchinson, Kans., the Indiana Board & Filler Co., Vincennes and Marion, Ind., the J. G. Cherry Co., Tama, Iowa, and the North Star Strawboard Mill, Quincy, Ill.

[4] W. Schacht in Kirchner, Das Papier, III B and C, 284-5; *Wochenbl. f. Papierfabr.* 2795, 1907.

[5] Cross and Bevan, Cellulose. 209.

[6] *Wochenbl. f. Papierfabr. 51*, 1139-1141, 2322-2323, 1920; *52* 1851-1853, 1921; Paper T. J. 73 No. 6, 34, 1921.

at least 50 per cent greater than that of board made at mills using the lime method of cooking.

Chemical Analysis of Wheat Straw and Strawboard

The substitution of Na_2CO_3 and Na_2SO_3 for lime in the cooking of straw should lead to quite different results in the composition of the product, because the solution of sodium salts is less alkaline than that of lime and there is less likelihood of the formation of insoluble compounds.

Samples of strawboard made by the two processes and of uncooked wheat straw, typical of that used in the tests were analyzed. The straw for the board sample numbered 7253-J3C2 was cooked at the Laboratory under the same conditions as that in Cook 8 except that a temperature of 152° C. was maintained for 4 hours instead of 145° C. for 6 hours. The more drastic conditions resulted in a yield of only 66.8 per cent. The other board samples were selected from those whose strength data are shown in Table 3. The materials were analyzed by the standard methods in use at the Forest Products Laboratory.

The action of the sodium salts on the straw under the conditions obtaining for sample 7253—J3C2 results in the removal of about one-half the ash, one-fourth the SiO_2, one-seventh the cellulose, and nearly half the lignin.

Samples P-485 and P-486 from straw cooked with lime, although made at different mills do not differ essentially in composition. In comparison with the sample from straw cooked with the sodium salts they contain nearly double the amount of ash, which increase is largely accounted for by the lime retained either as $Ca(OH)_2$ not thoroughly removed by washing or as insoluble lime salts of organic and inorganic acids. The content of silica is practically the same. Consideration of the data recalculated to the ash-free basis shows that the water-soluble matter is higher (probably owing to the less thorough washing given the commercial product), and that the materials soluble in 1 per cent NaOH have not been as thoroughly removed. The lignin content is practically the same and the cellulose content about 10 per cent lower.

The new product is characterized, therefore, by its low content of ash, its high content of cellulose, and its resistance to the action of 1 per cent NaOH.

Alkali Recovery

The small amounts of chemicals used for cooking make it economically feasible to use the new process without the installation of a recovery system. Should a recovery system be found desirable, however, it could doubtless be operated more easily than one used in connection with the alkaline processes for making straw cellulose. One of the difficulties met with in the latter is that the silica of the straw is dissolved and gives trouble by fluxing with the soda in the rotary incinerators and interfering with the settling of the lime sludge in the subsequent causticizing operation. Causticizing would be unnecessary in a recovery plant adapted to the process described in this paper, since the soda would be recovered largely as Na_2CO_3 and used as such. The small amount, only about one-fourth, of the silica removed in the cooking, would probably be insufficient to cause serious difficulties in the incinerators. In order to avoid the formation of sulphide, however, it is possible that some modifications may be rquired in the recovery process.

Comparison of Costs as Between the New Method and the Lime Method

The principal difference in the two processes as affecting cost is in the chemicals used. For lime cooking, H. G. Funsett[1] states that for each ton of straw there is required either 178 pounds of lime containing 80 per cent CaO and 20 per cent MgO, or 240 pounds of a dolomite lime. Assuming the lower figure and a yield of two-thirds of a ton of strawboard from a ton of straw, there would be required 267 pounds of lime per ton of board, which at $10 per ton would cost $1.34.

[1] Paper read before the American Pulp and Paper Mill Superintendents' Association, June 4-6, 1925.

For the new process soda ash and sulphur would constitute the chemicals purchased. The sulphur would be burned to SO_2 and absorbed in a solution of the soda ash. For these purposes the equipment would be of moderate cost, the overhead consequently negligible, and the labor cost not greater than that for handling the lime in the old processes. For each ton of board, again assuming two-thirds of a ton of board from a ton of straw, there would be required:

270 pounds soda ash at $1.60	$4.32
15 pounds sulphur at 1 cent	.15
Total cost for chemicals	$4.47

The net increase in cost of chemicals is therefore $3.13 per ton of strawboard, on the assumption of equal yields—i.e., two-thirds of a ton of board per ton of straw. It is believed, however, that the average yields in strawboard mills at present are lower than that assumed and, judging by the experimental data here reported, that yields higher than assumed would be obtained by the new process. The difference in the cost for chemicals would in such case be correspondingly decreased. The increased total cost of the new process would be still further offset by the larger amount of salable product resulting from any increase in yield from the straw and by the increased value of the board due to its superior quality.

Summary

A new process for cooking straw for strawboard has been developed which consists essentially in digesting the straw in a solution containing sodium carbonate and sodium sulphite. The most favorable proportions of chemicals are 7.5 pounds of Na_2CO_3 and 1.5 pounds of Na_2SO_3 for each 100 pounds of straw. The process as compared with the lime process gives a product of diminished odor, higher yield and superior physical properties, containing less ash and more cellulose, and more resistant to the action of one per cent NaOH.

A process for recovering the chemicals is not economically necessary but can be applied.

The cost of the new product may be as much as $3.13 per ton greater than that of the lime product. The difference, will, however, probably be much reduced or else compensated for by high yields and superior quality.

Acknowledgment

Sidney D. Wells, prior to his resignation from the Laboratory, supervised the major portion of the investigations here reported. The authors gratefully acknowledge the assistance rendered by him in this connection.

Traffic Association Moves to Kalamazoo

[FROM OUR REGULAR CORRESPONDENT]

KALAMAZOO, Mich., October 1, 1925.—The Michigan Paper Mills Traffic Association, formerly located in Chicago, has moved its offices to this city and when finally settled will occupy the offices in the second floor of the Press building, now used by the Fidelity Building and Loan Association. Temporary quarters have been taken in the same building.

A. G. Gilman, president of the Allied Paper Mills is president of the organization and C. A. Bradford, president of the Bradford Paper Company, is secretary. James F. Dougherty and J. A. Hackett are respectively general manager and assistant.

Fourteen paper manufacturing concerns are enrolled as members. They handle hundreds of thousands of tons annually of finished product, raw stock and coal. The companies are: Allied Paper Mills, Bryant Paper Company, Kalamazoo Paper Company, Kalamazoo Vegetable Parchment Company, Rex Paper Company, Standard Paper Company, Sutherland Paper Company, Western Board and Paper Company, Bradford Paper Company, Kalamazoo; MacSimBar Paper Company, Wolverine Paper Company, Otsego; Michigan Paper Company, Plainwell; Lee Paper Company, Vicksburg, and Eddy Paper Company, Three Rivers.

Waste Liquors and Gases of the Paper Industry

Survey of the Recent Domestic and Foreign Patent Literature on the Utilization of Waste Liquors and Waste Gases of the Pulp Industry, 1912-1924

By A. Schrohe[1]

Translated, with additions, by Clarence J. West, Chairman Committee on Abstracts and Bibliography, T. A. P. P. I. (Contribution No. 47 of the Committee).

(Continued from last week)

40. 1915. U. S. 1,137,779. H. K. Moore, Berlin. Recovery of soda from waste liquors, especially from the digestion of wood to obtain sulphate pulp.

The sulphate liquor from black ash, after causticizing and filtering, contains sodium sulphide, sodium sulphate, sodium hydrosulphide and sodium hydroxide. The black liquor is concentrated in a multiple effect evaporator to about 35° Bé., mixed with sodium sulphate and a suitable fuel, such as sawdust, bark or coke, etc., and the mixture sprayed into the upper part of a retort over a hot flame. The hot gases from the smelting furnace are forced under pressure through the drier at a temperature of 400-500° F., the temperature of the gases leaving the drier being from 220-230° F. The hot gases travel through the drier in the same direction as the material to be dried, so there is little danger of the material being ignited by the sparks carried by the hot gases. The patent contains illustrations of the apparatus showing how the process is made continuous.

41. 1915. U. S. 1,154,762. J. J. Gross, Hamburg. Tanning agent.

The hot liquor is first treated with hydrochloric and sulphuric acids to precipitate most of the lime; the filtrate, still containing a little lime, is treated with potassium chromate, K_2CrO_4. The filtrate is concentrated to 20° Bé., the precipitate which forms filtered and the filtrate further concentrated. The concentrate is the desired product.

42. 1915. U. S. 1,158,364-5. British 13,375. French 479,900 (1916). Norwegian 27,881 (1917). D. H. Bibb, New York. Briquetting of metal-containing dust, etc.

The mass, mixed with concentrated waste sulphite liquor, is formed, dried and heated to 600° F. (315° C.), without coking the liquor constituents. In English patent 197,433 (1923), Andrews and Co., London, declare that 450° C. is a more suitable temperature for the drying, the preheated briquettes being heated, *e. g.*, in a lead bath at this temperature.

43. 1915. English 24,196 (1914). J. G. Byrom, Heaton Chapel. Tanning material.

Waste sulphite liquors of 60-66° Tw. are mixed with carbolic acid, cresylic acid or with tar oils (light or middle oils) or with aniline and naphthalenedisulphonic acids. Seven examples are given.

44. 1915. French 477,895. Ch. Harnist, Elsass. Method for the manufacture of pulp and the utilization of the liquor resulting therefrom.

Instead of using calcium bisulphite liquor, the cellulose-containing raw material is digested with a liquor into which are passed successively or alternately, gaseous ammonia and sulphur dioxide. The ammonia is specially commended because of its solubility and the solubility of its salts, because of its high vapor tension and especially because of its value in the waste liquor as a fertilizing agent. The raw material in the digester is first heated with water, which drives out the air, from which the turpentine oil and other volatile products are recovered by condensation. The liquor from the digester is treated with suitable precipitating agents to separate the dissolved products (tannins, etc.); after filtration the clear liquor is returned to the digester, which is filled with the raw material from the first operation. Ammonia and sulphur dioxide are then passed in and the operation repeated. Finally the hot liquor is passed through a tower filled with coke, through which air or hot combustion gases are passed, thus concentrating the liquors and making them suitable for fermentation. The two additional patents, 24,034 and 24,174 (1922), contain details which clarify the original process and increase its usefulness.

45. 1916. D. R. P. 294,066. J. O. Lundberg, Flateby, Norway. Method for the evaporation of waste liquors of pulp manufacture or other liquors.

The evaporation is effected progressively by passing through a series of evaporators in such manner that the elements from which low pressure steam is drawn for other purposes, such as drying cylinders, are supplied with condensed water from live steam and not with the lye being evaporated, thus avoiding foul-smelling or dangerous gases. [Details are given in C. A. 12, 425.]

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46. 1916. U. S. 1,169,325. W. K. Freeman, Oscawana, N. Y. Method and apparatus for the recovery of violatile constituents of wood and other plant materials.

The patent relates specially to the utilization of long leaf pine (*Pinus palustris*) for pulp. From the digester filled with the wood chips, the atmospheric air is expelled by hydrogen gas or ether gas and the gas is then displaced by means of a suitable reducing liquor, introduced from below, the gas being driven into a gasometer. The avpors resulting during the digestion, *e. g.*, turpentine oil, is led to a separator, which is cooled by water; the portion not condensed is sucked out of the separator by a vacuum pump and liquefied by means of other condensers.

47. 1916. U. S. 1,175,424. W. K. Freeman, Oscawana, N. Y. Insulating materials.

The precipitate resulting upon the neutralization of waste sulphite liquor is mixed with magnesium chloride, magnesia, resins and powdered glass.

48. 1916. U. S. 1,202,317. D. R. P. 285,752 (1914). Swedish 42,108 (1917). British 120,724 (1918). E. L. Rinman, Stockholm, Sweden. Method for treating waste sulphite liquors.

The liquors intended for this treatment may first be freed from calcium sulphite, from the sugar by fermentation and from other substances in the usual manner. The waste liquor is first freed from sulphur dioxide in the usual manner. It is then concentrated to 16-18° Bé and while the liquor is still hot (about 90°) it is treated with lime water (about 1 part calcium oxide to 2-3 parts of water) in such quantity that a cubic meter of liquor is used for about 25 kilograms of lime. The mixture is then introduced into an ordinary iron cellulose boiler, which may be either rotary or provided with a stirrer. The waste liquor is first boiled during 1-2 hours to 150°C after which the temperature is increased to 180°C (10 atmospheres). The boiler then contains a fine grained precipitate of lignin and calcium sulphite, which is easily filtered, and a solution of organic calcium salts, chiefly salts of oxyacids. The wet precipitate is treated with a solution of sulphurous acid containing enough sulphurous acid to dissolve the calcium sulphite. This solution may be used for a new hydrolysis (digestion). The separated lignin may be used as a fuel. The alkaline solution first obtained is then concentrated to 40° Bé and lime water added in such manner that on one mole-

[1] Papierfabrikant 23, 30-33, 63-65, 89-92, 158-161, 251-253, 284-287, 293-296, 306-307 (1925).

cule lime chemically bound come 1.5 molecules lime as hydrate of lime. This mixture is then concentrated and dry distilled in an acetone retort by means of superheated steam, giving acetone, methyl alcohol and oils. The residue is burned and the lime recovered. If the yield is to be increased, saw dust, wood waste, etc. may be added and distilled with lime. Sufficient lime must be employed so that all the organic substances dissolve upon heating and are changed into organic calcium salts, leaving the lignin and cellulose.

Compare also the report of the summer session, 1923, of the Zellstoff-und Papier-Chemiker und-Ingenieure in Dresden, p. 81-94; this is a report by Dr. Heuser upon the Rinman process.

49. 1916. English 11,509 (1915). Robeson Process Co., New Jersey. Tanning agents from waste sulphite liquors.

Highly concentrated, neutral waste sulphite liquor is treated with sulphuric acid to partially precipitate the lime and free it from ligninsulphonic acid; the remainder of the lime is precipitated with an alkali sulphate, which gives as a filtrate a tanning solution of 28-30° Bé.

50. 1916. British 7090 (1915). [French 74,336 (1914); Swedish 41,119 (Aug. 9, 1916); Norwegian 28,127 (1917). C. A. 10, 2813, 3174]. H. B. Landmark. Drammen. Method for the preparation of a tanning material from sulphite waste liquors.

The concentrated waste sulphite liquors are treated with an alkali carbonate beyond the point of neutralization to precipitate the iron and a part of the lime, and the filtrate is then treated with sulphuric or oxalic acid to precipitate the remainder of the lime Finally, this filtrate is treated with an excess of an organic acid and evaporated until a concentration is reached suitable for the decomposition of the saccharates which may be developed or for the inversion of the sugar, respectively.

51. 1917. D. R. P. 297,075. [Norwegian 27,784. Swedish 43,301] Hans Messow, Berlin. Method for preparing artificial graphite.

The resin-containing waste liquor of pulp factories is mixed with oxides of the heavy metals, *e. g.*, iron oxide and calcium phosphate, and, in the absence of air, the mixture is heated to a very high temperature and pressure. The siderite containing graphite thus prepared may be changed by hot rolls to larger particles.

52. 1917. D. R. P. 298,734. Addition to D. R. P. 285,752. E. L. Rinman, Stockholm. Method of treating waste sulphite liquor with alkali.

The organic calcium salts obtained by heating the waste liquor with calcium hydroxide are transformed into sodium or potassium salts by the addition of alkali hydroxides or alkali carbonates before the dry distillation. When one dry distills a mixture of organic sodium or potassium salts with strong bases, preferably in the presence of a sufficient amount of steam, there is obtained a distillate of acetone spirits, light and heavy oils and likewise ammonia and amines and a distillation residue consisting of sodium and potassium carbonates and carbon (charcoal) besides very small amounts of sulphur-containing materials. The sodium and potassium carbonates may be leached out of this residue but it is more advantageous to burn the charcoal of the distillation residue after the principle of the Le Blanc soda process; in this the sulphur compounds are transformed into calcium sulphide, the calcium carbonate into calcium oxide and the alkali compounds into carbonate; when this product is leached with water, preferably after pulverizing, the calcium sulphide remains undissolved.

53. 1917. D. R. P. 299,812. U. S. 1,231,153. Norwegian 28,566 (1918). A. H. Haeffner, Skutskar, Sweden. Method of sizing paper, pasteboard and similar products by means of waste sulphite liquor.

Waste sulphite liquors, neutralized, fermented and freed from the resulting alcohol, may be used in connection with alum or similar materials with or without the addition of ordinary rosin size.

54. 1917. U. S. 1,213,414. A. F. Richter and Th. L. Dunbar, Watertown and Potsdam, N. Y. Method and apparatus for the recovery of the waste gases and vapors from sulphite digesters.

Liquid and gaseous products from a digester used in the manufacture of sulphite pulp are cooled and separated from each other. The condensate flows into a fresh liquor container filled with lime, while the gases are further cooled and then added to a mixture of the liquor from which it was separated together with fresh liquor, for forming pulp.

55. 1917. U. S. 1,246,805. C. Ellis, Montclair, N. J. Fuel briquettes.

Unstable acid waste sulphite liquor, after concentration, is used as a binder with coal dust and fragments and a small amount of lime.

55A. 1917. U. S. 1,246,806. C. Ellis, Montclair, N. J. Waste sulphite liquor as a binder for fibrous materials.

Molded articles such as floor coatings or tool handles are formed by mixing sawdust, asbestos or other fibrous materials with acid sulphite liquor solids and lime. The sulphite liquor solids are rendered insoluble by treatment with the lime or by the use of barium hydroxide.

55B. 1917. U. S. 1,246,807. C. Ellis, Montclair, N. J. Fuel briquettes.

An aqueous solution is formed from dried atomized water-soluble solids of waste sulphite liquor and a mixture of this solution with lime is used as a binder in making fuel briquettes or for bonding other materials.

55C. 1917. U. S. 1,246,808. C. Ellis, Montclair, N. J. Weather resistant briquettes.

Briquettes of coal dust, ore, sawdust or other materials are formed with a binder composed of magnesium oxide and waste sulphite liquor solids.

56. 1918. D. R. P. 302,992. E. Hupertz, Rodenkirchen a. Rh. Method of tanning.

In tanning with phenols or formaldehyde or its derivatives, waste sulphite liquor is used as an auxiliary tanning agent.

57. 1918. D. R. P. 306,898. H. Achenbach, Nussdorf bei Ueberlingen. Method for purifying waste sulphite liquors with fire gases.

The waste liquors flowing from the digester, or partially purified waste liquors which are sprayed, are treated in the absence of air with a counter current of fire gases in a trickling tower. According to the addition patent 309,563 (1918), waste liquors which have been chemically treated or otherwise previously treated may be treated in countercurrent with fire gases in the absence of air, the operation being repeated several times. Sulfonic acid compounds are decomposed with the formation of sulphurous acid and the liquors are heated for any further treatment.

58. 1918. D. R. P. 308,144. Swedish 43,860. Canadian 191,432 (1919). R. W. Strehlenert, Göteborg, Sweden. Method for obtaining useful organic and inorganic substances by heating waste sulphite liquors in autoclaves.

Gases or vapors of an acid character, principally sulphur dioxide, are passed into the autoclave containing the liquor to be treated, so that a pressure is created in the autoclave which is essentially higher than the pressure corresponding to the temperature of the autoclave.

59. 1918. U. S. 1,253,853 and 1,253,854. Ch. Marchand, Kimberly, Wisconsin. Treatment of waste liquors of wood pulp mills.

The lime of the waste liquors is precipitated by means of sulphuric acid, the filtrate heated *in vacuo* and the condensed sulphurous acid treated with lime or the like. In the second patent the sulphurous acid is liberated by means of hydrochloric acid, separated by heating in a vacuum and recovered. The waste liquor may then be fermented. The mash is dried, burned and the residue leached for the recovery of potassium and magnesium chlorides.

60. 1918. U. S. 1,284,739 and 1,284,740. Norwegian 30,706,

30,939 (1920). R. H. McKee, New York. Treatment of waste sulphite liquors.

The liquor is oxidized with air in the presence of barium carbonate or barium sulphide with the formation of barium sulphate. The filtrate is fermented and the barium sulphate is reduced to the sulphide and again used.

61. 1918. U. S. 1,268,774. Ingvar Söraas, Indre Aalvick, Norway. Purification of waste sulphite liquors.

The previous introduction of atmospheric air into the waste liquor heated to about 100° C is impracticable, because during the oxidation calcium sulphate is formed and precipitated on the heating elements. This may be avoided by the following process. The waste liquor is first heated, preferably in an autoclave, by exhaust steam to about 100° C in a non-oxidizing atmosphere, at atmospheric or higher pressures. As the second step of the process, the liquor is transferred to a second autoclave and heated with live or super-heated steam, while compressed air is introduced, whereupon oxidation and spontaneous heating results and calcium sulphate and lignin precipitate simultaneously. The precipitation of calcium sulphate is not objectionable at this stage, since there are no heat interchange elements employed in the second autoclave. The air, freed of the greater part of its oxygen in the second autoclave, may be used to remove the oxygen from the air of the first autoclave. The precipitate is used as a fuel.

62. 1918. U. S. 1,326,414. H. K. Moore and J. J. Quinn, Berlin, N. H. Method for the recovery of soda contained in black liquor.

Black liquor is mixed with salt cake, put under pressure by means of pumps and heated while under pressure in a heating coil to a high temperature. It is then allowed to discharge through a nozzle into a furnace under conditions so regulated that the particles of highly heated liquor burst into steam and the residue is desiccated and ignited within a short distance of the nozzle. The mineral particles, including soda, float away with the furnace gases and are recovered by electrical precipitation. Heavier particles in the furnace may collect in a mass which becomes charred and in which sulphate is reduced to sulphite; this may be withdrawn through a spout.

63. 1918. British 117,922. J. K. Tullis, Paris. Tanning. The skin, previously treated with a chromium salt, is further tanned by means of waste sulphite liquor.

64. 1918. French 486,257. U. S. 1,236,948 (1917). H. B. Landmark, Norway. Method of precipitating organic substances contained in waste sulphite liquors.

In a process of precipitating organic substances contained in sulphite liquors by decomposition under pressure of the sulphonic acid compounds of the organic compounds contained therein, with the aid of a stronger acid, which is produced before or during the process of precipitation by the oxidation of sulphur dioxide in the liquor, the air or oxygen employed to effect the oxidation is activated by means of electric discharges within the autoclave used to maintain the pressure. The ozonized air may also be generated outside of the autoclave and forced in.

65. 1918. Austrian 91,008. Oderberger Chemische Werke Aktiengesellschaft, Oderberg. Product useful as an adhesive, finishing material, binding material or varnishing material.

In order to clarify waste sulphite liquor, it is mixed with suitable, finely-divided mineral colloids, such as clay, talc, zinc sulphide, calcium phosphate, etc.

66. 1919. D. R. P. 301,684. Willi Schacht, Weissenfels, a. S. Method of working up concentrated cellulose waste liquors by dry distillation.

The distillation is carried out under pressure, either in the presence or absence of alkaline compounds, and while passing through the mixture indifferent gases, steam, superheated steam or mixtures of gases and vapors. The crude oils thus obtained contains up to 25 percent of light oils with a high fuel value. The distillate also contains pyridine bases and many other very valuable products.

67. 1919. D. R. P. 302,484. Chemische Fabriken Dr. Kurt Albert and Lugwig Berend, Amöneburg b. Biebrich. Method for the preparation of a lubricating oil for machines by the use of concentrated waste sulphite liquor and easily volatile oils.

A permanent emulsion of concentrated waste sulphite liquor and oils may be prepared from one part of concentrated sulphite liquor and 2 or 3 parts tar oil by intimately mixing. Solutions of hard and soft fats, waxes, mineral waxes, paraffin, resins, etc., in suitable solvents or oils may also be used. If the sulphite liquor is acid, it may be neutralized with lime or baryta water.

68. 1919. D. R. P. 304,349. W. Mensing, Freiberg i. S. Tanning agent.

The tanning agent consists of waste sulphite liquor which has been heated with solid oxidizing agents, preferably chlorates. There is an increase in tanning action because of the destruction of the organic sulphur compounds.

69. 1919. D. R. P. 307,383, and addition patent 310,318. E. Jacoby, München. Method for removing the poisonous substances from waste cellulose liquors.

After the destruction of the sulphurous acid and the neutralization of the liquor by lime, the liquor is filtered and treated with small amounts of an absorbent material, such as kaolin, humin, or the like. It is assumed that the poisonous action towards the fermenting organisms is due to the substances of the resins and lignin classes in the waste liquor. According to the addition patent the method consists in treating the liquor with the absorbent materials and, if necessary with solutions of heavy metal salts, and then neutralized and filtered. The liquor is treated with a solution of humin, alum and chalk. The result is an increased yield of alchol upon ferementation.

70. 1919. D. R. P. 307,663. Feldmuehle, Papierlund Zellstoffwerke, A.-G., Berlin. Method of preparing lignin substances, insoluble in acids and suitable for paper sizing, from the lignin-sulfonic acids of waste sulphite liquor.

Purified or unpurified, concentrated or dilute waste liquor is allowed to flow into a hot concentrated alkaline solution and heated until the end of the reaction. Better results are thus obtained than if the alkali solution is poured into the waste liquor. The lignin material precipitated from the aqueous solution by acids is dissolved in alkali or ammonia, giving a solution suitable for sizing even the better grades of paper.

(To be continued)

H. M. Gimlin Joins Hawthorne Paper Co.

KALAMAZOO, Mich., October 6, 1925.—Horace M. Gimlin has become associated with the Hawthorne Paper Company as vice-president and manager of sales. Mr. Gimlin took over his new work on October 1 and has already settled down as one of the Hawthorne family.

Mr. Gimlin has had a very wide experience in the fine paper business, having spent the past 17 years in this branch of the industry. During this time, he has been associated with Bradner-Smith Company, Chicago, Dwight Brothers Paper Company, Chicago, and with the Gilbert Paper Company, Menasha, Wis.

Mr. Gimlin has a large acquaintance among the mills and with the general printing and converting trade and this acquaintanceship, together with his well-known ability in the sales end, will make him a very happy addition to the Hawthorne organization.

The officers of the Hawthorne Paper Company are now as follows:—A. H. Dwight, president and manager; Horace M. Gimlin, vice-president and manager of sales; S. B. Monroe, treasurer and F. C. Clark, secretary.

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Trade Statistics and Public Policy*

By Franklin D. Jones

The decisions of the United States Supreme Court handed down on June 1 in the Maple Flooring Manufacturers Association and the Cement Manufacturers Association cases, declaring lawful the interchange of trade statistics by members of a trade association, are among the most important cases ever decided involving the law of business competition. The Supreme Court holds that "trade associations or combinations of persons or corporations which openly and fairly gather and disseminate information as to the cost of their product, the volume of production, the actual price which the product has brought in past transactions, stocks of merchandise on hand, approximate cost of transportation from the principal point of shipment to the points of consumption . . . and who, . . . meet and discuss such information and statistics without, however, reaching or attempting to reach any agreement or any concerted action with respect to prices or production or restraining competition, do not thereby engage in unlawful restraint of commerce." The cases are unique in that the Supreme Court, in applying the rule of reason, recognizes the value of testimony of expert economists, cites economic text-books, and evinces an intention to determine great economic questions arising under the anti-trust acts on the basis of facts rather than by the application of artificial technical legal rules. The cases involve a great question of public policy as to which Secretary Hoover, on the one hand, and the Department of Justice and Federal Trade Commission on the other, have been divided. The decisions sustain Secretary Hoover's viewpoint; in fact, they go beyond his published statements as to what might be done with a due regard to the public interest. It is possible that the court has too loosely prescribed the limits on this form of co-operative action, but basically the decisions are sound from an economic standpoint and will ultimately have a profound effect upon American industries.

I

The evolution of industry is making the collection and dissemination of facts by each industry more and more important. Most manufacturers before the Civil War, broadly speaking, had a local distribution. Business conditions in the territory surrounding a plant were the subject of personal knowledge. The production available, retailers' stocks, crop conditions, building conditions, and all of the local factors which would affect his business could be ascertained with approximate accuracy at least. The manufacturer served a limited market whose needs he knew and he could plan his production and fix his prices accordingly.

But as his goods moved to distant markets and as distant competitors brought their goods to his markets, the situation confronting the manufacturer wholly changed. As an individual he has little knowledge as to current or future production in the enlarged market in which he sells. The volume of the commodity in process of distribution in the hands of thousands of wholesalers and retailers cannot even be approximated. The large manufacturer, producing in quantity with a heavy overhead and narrow margin of profit, is always faced with the menace of a heavy over-production in his industry and a violent fluctuation in price forcing heavy losses. The smaller manufacturer, often forced to seek distant markets, is well-nigh helpless. Trade journals furnish him very valuable but incomplete data, and talks with other business men, together with the reports of his salesmen based upon interviews with shrewd purchasing agents, usually complete his fund of information. If there are numerous manufacturers in the industry all working in more or less ignorance of the facts, the almost inevitable results are alternating periods of overproduction and scarcity with great fluctuations in price. Violent fluctuations in price not only attract speculators but also require their services to assume the risks, thus increasing the burden of uncertainty upon the industry. Shifting conditions have thus placed the business man in a position where, although he may have a vastly greater fund of general information, he does not have as exact information as to actual conditions of supply and demand in his own widened market as he had a half-century ago.

The issue presented is whether we want a competitive system functioning with buyers and sellers possessing the fullest possible information as to conditions in their markets, or a competitive system based upon enforced ignorance of facts in so far as the government can compel the continuance of such a situation. The Supreme Court, while carefully guarding against the use of trade statistics to effect undue restraints of competition, recognizes the economic value of united action to collect and broadcast the business information relative to market conditions which expedites and stimulates trade by furnishing reliable facts of value to the business man in formulating his own individual policy.

II

The functioning of the competitive system would be greatly improved were every buyer and seller accurately apprized of conditions affecting supply and demand. Such a result cannot even be hoped for, but there are various classes of information the wide dissemination of which, now legalized by these decisions, would operate to the benefit of the business man and of the public.

We should have accurate data showing the productive capacity of every important industry. It is surely to the interests of the nation to utilize its fund of capital for the most productive uses.

Cost Section

* From "Harvard Business Review."

it is admittedly an unwise policy for an individual manufacturer to increase the capacity of his plant far beyond the capacity of his markets. Is it not likewise unwise, as a national policy, to encourage conditions which will result in an industry developing its physical capacity beyond the needs of consuming demand?

If information as to the productive capacity of our different industries, combined with the annual consumption of the products they produce, is widely disseminated, it ought to result in substantial public benefit. In the first place, it would tend to retard overconstruction and the waste of capital. If men with capital available for investment knew that the coal industry, for example, was continuously faced with overproduction, they would hesitate to enter the mining business. Bankers supplied with such information would hesitate to finance such ventures. The Federal Trade Commission shortly after its organization, contemplated the compiling of such information in some industries but for some reason decided not to do so. While unwise investments of capital will always be made, a widespread knowledge of the productive capacity of our various industries ought, at least in a measure, automatically to direct the capital of the nation to the most productive and profitable uses.

In the second place, such information, to the extent it discouraged the development of plant production to a point far beyond the real needs of trade and commerce, would tend to prevent monopoly. Whenever conditions of overproduction are created in an industry, the incentive of necessity forces efforts to control competition. Men do not willingly lose money for protracted periods. The great development of plant equipment during the war has created conditions of overproduction in many industries and, as a result, there is at the present time a movement for the merger of properties which threatens far to exceed the great merger period of the nineties which brought about the antitrust agitation of the Roosevelt administration. Such mergers involving promoters' and underwriters' costs, and the purchase of essential properties at highly inflated values, often not only result in a temporary control of production and price, but also force their owners to exact high prices in order to secure the customary rate of return on the inflated capitalization. A governmental policy which does absolutely nothing to supply or permit of the compilation of the facts which might tend to prevent the diversion of capital into crowded industries where it will inevitably be dissipated, creates a condition which inevitably leads to efforts artificially to control conditions by monopolistic devices.

Finally, the existence of such information would be invaluable in time of war. Had such facts been available to the government at the time of the World War, months of confusion in the organization of industries, planning of schedules, placement of contracts, and so on, would have been avoided. The War Department, for some months, has been endeavoring to organize information of this character; but such data should not rest in its dusty archives. It should not only be available to industry and to the public, but should receive the widest publicity.

III

There is need for the collection and dissemination of cost figures. Viewed from a public standpoint a wide and exact knowledge of costs is beneficial. Its effect would very probably be to stabilize price. On the one hand, it would tend to result in an increase in prices by some of those concerns which ignorantly sell below their own costs, failing to take into account such items as depreciation, depletion, and the like, until too late. On the other hand, it would tend to decrease the prices of other concerns by revealing to them the items in which their costs were high, thus enabling them to make reduction. Costs are the accurate measure of the efficiency of labor, of machines, of every factor in a business. Is not the business man entitled to learn from the experience of others, by comparing what their machines, their labor, their selling forces are doing with his own, or must he isolate himself because the widespread adoption of the best business practice tends toward less variation in costs and therefore in price? A stabilization of prices which results from great efficiency in business methods rather than price-fixing agreements is obviously beneficial in steadying demand, in reducing the risks of doing business, and thus lessening the need for speculators who assume such risks.

Moreover, the development of adequate cost figures in industries would supply a means of gauging, in a measure, at least, the relative efficiency of different-sized business units. There has been a great deal of discussion founded upon very few facts as to the relative efficiency of large and small business units. In America the efficiency of quantity production and the success of some large concerns with a highly integrated organization have brought about a wide-spread belief that the larger the concern is the greater the efficiency secured, and that monopoly is therefore the most efficient form of business organization. Theoretically, a strong case may be made for this contention. But facts rather than theory must determine the proposition. There is a belief among a number of business men employed both in manufacture and distribution, with whom I have talked during the past several years, that in their industries there is a point of maximum efficiency, so far as the size of the business and its profitableness are concerned. With the great uncertainties of the market resulting from the tremendous volume of production under our factory system, great economic forces are at work, and the huge concern with a large overhead faces graver problems than the smaller concern. A study of the costs of the different sized units in an industry, of the relation of overhead to total costs, of earning ratio to the capital invested for a period of years, might develop most valuable information as to the relative efficiency of different-sized units in industries. In each industry the differing conditions would no doubt produce different results. But if from a comprehensive study of facts it could be even approximately determined in each industry what sized unit was most efficient, the publication of the facts within the industry would no doubt in time place the industry on a more productive and a sounder economic basis. Facts such as these would at least be more helpful than the glittering generalities we now hear as to the relative efficiency of the monopolistic and competitive systems. And if by chance it were conclusively demonstrated that very large units were inefficient and costly in a particular industry, the merger movement and monopolies would be more effectively checked through the natural actions of businessmen in seeking the most productive form for their investments than would be accomplished by a host of laws on the statute books.

Again, if our protective tariffs are ever to be put on a scientific basis, a knowledge of the costs of manufacture in the different industries is essential, moreover, the last six centuries of Anglo-Saxon history repeatedly disclose that the almost inevitable result of war is the fixing of prices of many commodities. It is of vital importance to an industry; it is of equal importance to the government, that ill-advised action be avoided when any attempt is made artificially to control the delicate mechanism of the competitive system in this way. During the last war many of our industries and branches of industries were threatened with catastrophe because of the lack of such data. They found that government officials, pressed to the limit to secure supplies for war needs, were sometimes inclined arbitrarily to fix prices instead of awaiting the results of lengthy cost investigations. The decision of the Supreme Court in the Maple Flooring Manufacturers Association case, while not discussing these many phases of this form of activity, clearly holds that costs of production are "legitimate subjects of inquiry and knowledge in any industry".

But it must be admitted that there are abuses which may arise, particularly in association uniform cost accounting systems, which holds possibilities of great harm to the public. Few people will defend the use of uniform cost system for the purpose of indirectly fixing or enhancing prices, and the court points out that such a misuse of such data is a violation of the laws. Experience has already shown that it is possible for members of an industry

to agree on fixed items of cost such as depreciation, or depletion, or to fix an alleged uniform cost of raw materials purchased at widely varying prices, thus subverting the cost system from its legitimate purpose and making it a device for enhancing the general level of prices.

The Supreme Court, in the Maple Flooring Association case, holds that the computation and distribution of average costs, when such computations are made with all *practicable accuracy, based upon actual costs fairly ascertained from the actual experience of members, is lawful.* This particular ruling may easily be misconstrued by business organizations, and it should be pointed out that it does not legalize arbitrary averages arrived at to enhance prices. It is possible to compute alleged average costs for an industry, and bring about the general adoption of such costs as a mechanical means for computing prices when such costs have no substantial relation to the actual costs of the individual concern and the real purpose of their use is to increase prices. These are abuses which can and have been reached through prosecution by the government, and the decisions just handed down by the Supreme Court not only do not legalize them but guard against them. But the abuses do not negate the great value of wide-spread knowledge of costs nor the value of uniform methods for accurately determining individual costs for comparative purposes.

IV

The third group of business statistics, the wide-spread knowledge of which is of real value to the business man and to the public are those dealing with current conditions of supply and demand. The collection and distribution of such data is now declared lawful by the Supreme Court. Such data can be procured only by the government or through collective action. The cost of compilation and distribution by the government is excessive. The Department of Commerce has done some valuable work in this line in its monthly Survey of Business, but obviously the government cannot collect and distribute such data for our many industries. The alternative is for each industry to gather and disseminate such information itself either directly or indirectly. Some government officials can see in such an activity only a conspiracy to enhance prices. They witness the operation of such activities and their stabilizing effect upon prices, and draw the conclusion that such an effect can be procured only by a combination or a conspiracy in restraint of trade. A tendency toward uniformity of price is in their minds conclusive evidence that competition is being artificially restricted. It must be frankly admitted that the wide-spread dissemination of accurate information as to the market conditions tends in a measure to stabilize prices. If such information discloses to a manufacturer of tires, for example, that the dealers are heavily overstocked on one particular type of tire, ordinary business sense would suggest that he divert his production to other types. In taking such action he does not combine, conspire, or even talk with a competitor. As a business man he exercises his independent judgment as to the wise policy for him to pursue in a competitive market upon known facts. And while his lessened production may tend to hold up prices on the one type of tire, the shift of his production to other types increases their supply and in return tends to lessen their prices. There is thus a stabilization of price without any public injury. Similarly, if the shipper of transit cars of vegetables or lumber has accurate information that certain large consuming centers are over-supplied, with car standing on demurrage, while in others prices are firm and supplies short, where will he as an intelligent business man send his shipment? Or if a lumber manufacturer finds that the reports of the stock on hand of his competitors show a heavy accumulation of stocks of particular grades and sizes at the mills, what will he as a prudent business man do—blindly continue the manufacture of those grades and sizes, foolishly fighting against the inexorable law of supply and demand, or reshape his production to the demands of the market? Why should the business man be denied this information except as he can secure it partially from salesmen, trade journals, or private agencies? Is it not to the interest of the public thus to bring about the greatest possible fluidity of the supply, so that consumers will not be paying excessive prices for one product and low prices for another, or paying excessive prices in one market and buying considerably below cost in another? By thus increasing the fluidity of the supply through the possession of accurate information as to market conditions by all buyers and sellers, there would result a tendency toward a uniform price without the slightest lessening of competition. Eliminate fraud, eliminate ignorance of facts from the bartering of the market, thus projecting both buyer and seller, and inevitably, under the unrestricted operation of competition, the margin of daily fluctuation in price would be substantially lessened. Excessive prices and unduly low prices springing from such causes would be eliminated; but competition, based upon an intelligent knowledge of conditions, would be as intense as ever.

Not only would accurate knowledge of the markets tend to increase the fluidity of the supply, it would also tend to bring about a closer adjustment of the supply to the demands of the market, stabilizing production so as to avoid in a measure alternate periods of overproduction and underproduction, thus lessening the more basic fluctuations in price. It is gravely to be doubted whether there is any public interest served by manufacturers producing a heavy overproduction forcing prices below cost, compelling the shutdown of plants, and unemployment, with their resultant hardships and economic losses. Yet in one industry after another, manufacturers are compelled to project their production schedules on insufficient facts, and have no accurate gage for comparing their position with the general conditions in the industry. If the volume of trade of an industry is falling off while the individual's business is increasing, why should he not be entitled to know that fact? If, on the other hand, the volume of trade is increasing while his business is standing still, would not accurate information showing that fact stimulate greater competition on his part to get the business? If reports of a number of concerns in the industry show a general trend toward smaller orders, why should the business man be deprived of that knowledge? The collection and dissemination of such facts might, it is true, tend to lessen the recurrent periods of overproduction which demoralize industry, create unemployment, and foster speculation; but only as the result of the intelligent reaction of many individual concerns to established facts rather than because of any agreement or combination to restrict production or restrain trade. The difference is a vital one, for where such result comes from publication of facts, every businessman is free to do as he pleases without any restriction whatsoever and is as strong a competitive factor as ever, except that he is better informed; while, under any agreement in restraint of trade, production is artificially controlled without regard to the constantly shifting conditions. A more steady production would certainly seem in the public interest. And certainly wide fluctuations in prices do not encourage normal, healthy trade. In one country after another, it has been shown that when they become too violent they paralyze business and force in the speculator to assume the risks, at a heavy cost to the public.

Give to the individual manufacturer information as to current production, stocks on hand, current orders, unfilled orders, and current shipments; and, acting individually, he would curtail his production when there was obviously an oversupply in the industry threatening to force prices below cost of production or increase his production when stocks are becoming scanty. In the absence of any agreement in restraint of trade, as long as prices remain above costs, competitors will zealously strive to get the business. Under a quantity system of production, there will always be competitors to get business which gives them even a small profit. The operation of competition, if the laws against restraint of trade are rigorously enforced, will prevent the exaction of high prices. Indeed, wide-spread knowledge of prices would make such com-

petition more effective by revealing the markets, or the type of commodity which held forth the greatest opportunity for profit. We must recognize that the fundamental change in our form of industrial organization, the vastly expanded areas of competition already discussed, makes the collection and publication of such facts well-nigh essential to the business man. The proper operation of the competitive system demands it in fairness to him.

The Supreme Court, in its decisions, recognizes these facts. In the Maple Flooring case it says:

It is not, we think, open to question that the dissemination of pertinent information concerning any trade or business tends to stabilize that trade or business and to produce uniformity of price and trade practice. Exchange of price quotations of market commodities tends to produce uniformity of prices in the markets of the world. Knowledge of the supplies of available merchandise tends to prevent overproduction and to avoid the economic disturbances produced by business crises resulting from overproduction. But the natural effect of the acquisition of wider and more scientific knowledge of business conditions, on the minds of the individuals engaged in commerce, and its consequent effect in stabilizing production and price can hardly be deemed a restraint of commerce or if so it cannot, we think, be said to be an unreasonable restraint, or in any respect unlawful.

There is not only no unreasonable restraint of trade in the mere collection and dissemination of such facts; there are substantial benefits to the public flowing from such an activity. The benefits resulting from a more stabilized production, with the consequent tendency to eliminate speculation, to steady employment, to stimulate trade, and to assure to the public a true competitive price based upon the operation of the law of supply and demand, free from the interference of fraud and ignorance on the part of buyer and seller, have already been discussed. Such information is, moreover, especially valuable to the small business man who has not the farflung organization which enables his larger competitors to keep more fully advised as to market conditions. To the extent such data help the smaller manufacturer and distributor to become more effective in competition, to just that extent it tends to prevent monopoly. Again, is it not self-evident that as we amass a great fund of continuous information in our many industries, we will acquire the basic economic data on which a scientific study of business trends and cycles can be made? Such a fund of facts will also furnish the ground-work upon which any system of federal regulation should be based if circumstances show the need for it in any industry. And in times of war it is obvious that it would be of the utmost value to the government to be able immediately to secure from any industry the facts showing stocks on hand, current production, and similar data accurately portraying the ability of the industry and its individual members to supply forthwith the urgent needs of the government.

V

While the fullest possible knowledge of market conditions by all buyers and sellers is essential to the proper operation of the competitive system under our modern organization of industrial society and is of real value to the public, it cannot be gainsaid that the collection and dissemination of such data by business men offers opportunities for abuses, and it should be carefully noted that the Supreme Court uses well-guarded language as to the legal limits of such an activity. If we agree as to the value of statistical information of the character discussed to the business man and to the public, a sound policy ought to be directed, as the Supreme Court now directs it, not as destroying the great statistical system which has been evolved by our many industries, but rather at eliminating these abuses.

The Supreme Court has wisely pointed out the abuses involved in the interchange of business data. The Supreme Court, up to this time, has laid down four features of a cooperative interchange of statistics which taint any such action with illegality.

1—The Court condemns secrecy in the use of such information. In all its previous decisions the court has stressed this point; and, in the Maple Flooring case, is careful to state it decides only that it is not unlawful to gather "openly" and disseminate such information. The Court evidently deems it against the public interest to permit sellers to combine to secure secretly the information giving them the most intimate knowledge of what their competitors are doing in order to "deal with widely separated and unorganized customers necessarily ignorant of the true conditions." While our form of government is based upon the fullest possible protection of individual rights, the courts look upon combined action with the closest scrutiny and the Supreme Court reiterates its statement in the Linseed Oil case where it said that, while the individual may exercise great freedom, "concerted action through combination presents a wholly different problem and is forbidden when the necessary tendency is to destroy the kind of competition to which the public has long looked for protection." If the privilege of combining to compile and disseminate such statistics is to be granted, so that the basic facts of the markets are to be known it seems obvious that buyers as well as sellers should be informed, otherwise the exercise of the privilege may prevent rather than protect the natural operation of the law of supply and demand. Full publicity of such facts, so that both sellers and buyers may be as fully informed as possible, seems, therefore, essential.

2—Fraud in the compilation of such data is unquestionably unlawful. Here, again the court is careful to limit this activity by requiring that such data are being "fairly" gathered and disseminated. There might at times be a temptation to the official compiling such data to omit some portion of his information, as, for example, sales at very low prices, with the intention of bolstering up the market by giving a false impression as to the fair level of prices. Such action could not be defended, although such a practice would soon correct itself by destroying confidence in the information. For centuries it has been unlawful at the common law to disseminate false information for the purpose of enhancing or curtailing prices.

3—Any concerted action, based upon such data, the necessary tendency of which is to restrict competition, is likewise condemned. It is improper for an association official to comment on the data, indicating his belief as to market trends, or making recommendations as to production or prices. Such action on his part, if he has the confidence of his members in any degree, tends strongly to bring about concerted action along the lines of his recommendations, thus restricting competition. Such action was condemned in the Hardwood case. This decision is reaffirmed in these decisions. It is likewise doubtful whether the courts will ever approve of the distribution of identified information—that is, identifying the figures of each competitor. Identified figures go much further than giving a business man full information as to basic conditions in his industry, by furnishing him intimate facts as to the individual business policies and justment of all his competitors. The circulation of identified information could very easily lead to business men substituting the judgment of some leading concern in the industry for their own or entering into an understanding to follow a leader whose prices and other policies could be easily followed under such a plan. Such information likewise identified the price-cutter or the concern producing in heavy volume, and gives opportunity for the exertion of social and other pressure upon him to change his tactics. In such action there is usually present a tendency to restrict competition.

4—The court carefully limits the rights to circulate prices, to the "actual" price which the product has brought in *past* transactions. The court does not legalize the interchange of quotations and other information leading up to the sales which would give the combined sellers an advantage over the buyer. This was condemned in the Linseed Oil case, which case is cited with approval in the present decisions.

In one respect the decisions are apt to create a great deal of confusion and misunderstanding. The court expressly holds that members of a combination may "meet and discuss such information and statistics." It cannot be too strongly emphasized that the court states they may do this only provided they do not reach or at-

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Imports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING OCTOBER 3, 1925

SUMMARY

News print	1244 rolls
Wrapping paper	69 bdls., 32 cs., 7 bls., 2 rolls
Printing paper	191 cs., 50 rolls
Cigarette paper	75 cs.
Wall paper	15 bls., 2 cs.
Paper hangings	32 bls., 3 cs.
Colored paper	20 cs.
Surface coated paper	141 cs.
Baryta coated paper	50 cs.
Cellophane paper	4 cs.
Writing paper	4 cs.
Drawing paper	115 cs.
Decalcomania paper	2 cs.
Packing paper	99 rolls
Tissue paper	18 cs., 1 ble.
Filter paper	4 cs.
Foolscap	16 cs.
Miscellaneous paper	147 cs.

CIGARETTE PAPER

Surbrug Co., Majestic, Havre, 30 cs.

Standard Products Corp., Majestic, Havre, 40 cs.

British American Tobacco Co., Celtic, Liverpool, 5 cs.

WALL PAPER

A. C. Dodman, Jr., Inc., Lapland, Antwerp, 1 ble.

A. C. Dodman, Jr., Inc., Lapland, Antwerp, 2 cs.

A. C. Dodman, Jr., Inc., Scythia, Liverpool, 2 bls.

R. F. Downing & Co., Caronia, Liverpool, 2 bls.

R. F. Downing & Co., Reliance, Hamburg, 10 bls.

PAPER HANGINGS

W. H. S. Lloyd & Co., Caronia, Liverpool, 13 bls.

W. H. S. Lloyd & Co., Caronia, Liverpool, 3 cs.

A. C. Dodman, Jr., Inc., Scythia, Liverpool, 19 bls.

NEWS PRINT

Parsons & Whittemore, Inc., Bremen, Bremen, 1087 rolls.

Chemical National Bank, Westphalia, Hamburg, 93 rolls.

W. Hartman & Co., Inc., Anaconda, Rotterdam, 84 rolls.

PRINTING PAPER

P. Puttman, Lapland, Antwerp, 78 cs.

International Forwarding Co., Pioneer, Antwerp, 18 cs.

International Forwarding Co., Westphalia, Hamburg, 2 cs.

Keuffel & Esser, Westphalia, Hamburg, 50 rolls.

Perry, Ryer & Co., Tuscania, Glasgow, 73 cs.

B. F. Drakenfeld & Co., Scythia, Liverpool, 14 cs.

C. Steiner, Reliance, Hamburg, 6 cs.

COLORED PAPER

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SURFACE COATED PAPER

P. C. Zuhlke, Lapland, Antwerp, 75 cs.

Gevaert Co. of America, Lapland, Antwerp, 34 cs.

P. Puttman, Lapland, Antwerp, 22 cs.

Phoenix Shipping Co., Reliance, Hamburg, 10 cs.

BARYTA COATED PAPER

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CELLOPHANE PAPER

DuPont Cellophane Co., De Grasse, Havre, 4 cs.

WRITING PAPER

J. W. Hampton, Jr., & Co., Reliance, Hamburg, 4 cs.

DRAWING PAPER

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H. Reeve Angel & Co., Inc., American Trader, London, 4 cs.

Keuffel & Esser, Westphalia, Hamburg, 60 cs.

DECALCOMANIA PAPER

Phoenix Shipping Co., Bremen, Bremen, 2 cs.

WRAPPING PAPER

F. C. Strype, Lapland, Antwerp, 16 cs.

F. C. Strype, Lapland, Antwerp, 2 rolls.

Blauvelt Wiley Paper Manfg. Co., Tuscania, Glasgow, 69 bdls.

J. P. Hefernan Paper Co., Capetown Maru, Hamburg, 7 bls.

F. L. Kraemer & Co., Westphalia, Hamburg, 10 cs.

F. L. Kraemer & Co., Reliance, Hamburg, 6 cs.

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National City Bank, American Trader, London, 99 rolls.

TISSUE PAPER

R. Hoe & Co., American Trader, London, 1 ble.

Standard Products Corp., Majestic, Havre, 18 cs.

FILTER PAPER

H. Reeve Angel & Co., Inc., American Trader, London, 4 cs.

FOOLSCAP

Old Master Pulp & Paper Co., Pr. Wilson, Trieste, 16 cs.

PAPER

Japan Paper Co., Duilio, Genoa, 1 cs.

W. H. S. Lloyd & Co., De Grasse, Havre, 3 cs.

Standard Products Corp., De Grasse, Havre, 69 cs.

J. Kennedy & Co., De Grasse, Havre, 1 cs.

Japan Paper Co., De Grasse, Havre, 6 cs.

Kolesch & Co., Majestic, Southampton, 1 cs.

Guibout freres, France, Havre, 6 cs.

H. de Maguinn, France, Havre, 10 cs.

Globe Shipping Co., France, Havre, 9 cs.

Standard Products Corp., France, Havre, 41 cs.

RAGS, BAGGINGS, ETC.

Mutnick Bros., McKeesport, Dunkirk, 6 bls. rags.

State Bank, McKeesport, Havre, 45 bls. rags.

State Bank, McKeesport, Havre, 117 bls. bagging.

Darmstadt, Scott & Courtney, McKeesport, Havre, 28 bls. rags.

The Stone Bros. Co., Inc., McKeesport, Havre, 13 bls. rags.

E. J. Keller Co., Inc., McKeesport, Havre, 99 bls. rags.

Atlas Waste Manfg. Co., McKeesport, Havre, 40 bls. rags.

I. Heuerfeld, McKeesport, Havre, 7 bls. rags.

P. J. Patricof, McKeesport, Havre, 87 bls. rags.

V. Galaup, McKeesport, Havre, 6 bls. rags.

Chase National Bank, Pioneer, Antwerp, 14 bls. rags.

National City Bank, Lapland, Antwerp, 53 bls. bagging.

E. J. Keller Co., Inc., Lapland, Antwerp, 210 bls. flax waste.

E. J. Keller Co., Inc., Francisco, Antwerp, 82 bls. bagging.

Brown Bros. & Co., Francisco, Antwerp, 65 bls. rags.

Brown Bros. & Co., Bristol City, Bristol, 132 bls. rags.

E. J. Keller Co., Inc., Caronia, Liverpool, 89 bls. paper stock.

Brown Bros. & Co., Tuscania, Glasgow, 90 bls. paper stock.

Brown Bros. & Co., Tuscania, Glasgow, 75 bls. bagging.

Castle & Overton, Inc., Capetown Maru, Hamburg, 78 bls. rags.

A. W. Fenton, Inc., Capetown Maru, Hamburg, 217 bls. rags.

J. M. Rabassa, Orizaba, Havana, 67 bls. rags.

A. W. Fenton, Inc., City of St. Joseph, Leghorn, 188 bls. rags.

Brown Bros. & Co., City of St. Joseph, Leghorn, 292 bls. rags.

Atterbury & McKelvey, City of St. Joseph, Leghorn, 141 bls. rags.

Albion Trading Co., City of St. Joseph, Leghorn, 39 bls. rags.

A. W. Fenton, Inc., City of St. Joseph, Bari, 282 bls. rags.

Brown Bros. & Co., City of St. Joseph, Bari, 85 bls. rags.

Brown Bros. & Co., Bremen, Bremen, 214 bls. rags.

A. W. Fenton, Inc., Bremen, Bremen, 51 bls. rags.

Castle & Overton, Inc., Bremen, Bremen, 18 bls. rags.

E. Butterworth & Co., Inc., Celtic, Liverpool, 46 bls. bagging.

B. D. Kaplan, Scythia, Liverpool, 48 bls. rags.

Mechanics & Metals National Bank, Scythia, Liverpool, 35 bls. bagging.

Brown Bros. & Co., Aden Maru, Leghorn, 108 bls. rags.

Irving Bank Columbia Trust Co., Aden Maru, Leghorn, 77 bls. rags.

E. J. Keller Co., Inc., Westphalia, Hamburg, 142 bls. rags.

The Stone Bros. Co., Inc., Westphalia, Hamburg, 24 bls. rags.

Atterbury & McKelvey, Anaconda, Rotterdam, 129 bls. rags.

E. J. Keller Co., Inc., Anaconda, Rotterdam, 54 bls. rags.

E. J. Keller Co., Inc., Anaconda, Rotterdam, 165 bls. bagging.

Atlas Waste Manfg. Co., Anaconda, Rotterdam, 40 bls. cotton waste.

Reis & Co., Anaconda, Rotterdam, 9 bls. cotton waste.

Mechanics & Metals National Bank, Reliance, Hamburg, 77 bls. rags.

A. W. Fenton, Inc., Cabo Villano, Leghorn, 158 bls. rags.

Anglo-South American Trust Co., Cabo Villano, Leghorn, 18 bls. rags.

National Bank of Commerce, Cabo Villano, Leghorn, 35 bls. rags.

Brown Bros. & Co., Cabo Villano, Leghorn, 41 bls. rags.

Atterbury & McKelvey, Cabo Villano, Marseilles, 293 bls. rags.

E. J. Keller Co., Inc., Cabo Villano, Marseilles, 79 bls. bagging.

E. J. Keller Co., Inc., Sinaia, Alexandria, 448 bls. rags.

E. J. Keller Co., Inc., Sinaia, Alexandria, 68 bls. bagging.

Amsinck, Sonne & Co., Inc., Sinaia, Alexandria, 80 bls. rags.

E. J. Keller Co., Inc., J. Luckenbach, Kobe, 900 bls. rags.

OLD ROPE

Salomon Bros. & Co., McKeesport, Havre, 266 bls.

E. J. Keller Co., Inc., Lapland, Antwerp, 113 coils.

E. J. Keller Co., Inc., Cabo Villano, Marseilles, 39 bls.

Brown Bros. & Co., Bristol City, Bristol, 119 coils.

Jaffe Products Co., Orizaba, Havana, 62 bls.

MANILA ROPE

Ellerman's Wilson Line, Caronia, Liverpool, 29 bls.

WOOD PULP

Tidewater Paper Mills Co., Sigdal, Murray Bay, 6229 bls. ground pulp, 1244 tons.

Castle & Overton, Inc., Anaconda, Rotterdam, 433 bls. wood pulp, 86 tons.

Bulkley, Dunton & Co., Nordhval, Stugsund, 1250 bls. sulphite.

Bulkley, Dunton & Co., Nordhval, Stugsund, 1250 bls. sulphate.

Bulkley, Dunton & Co., Nordhval, Iggesund, 1200 bls. sulphate.

J. Anderson & Co., Nordhval, Stugsund, 2500 bls. sulphite.

Central Union Trust Co., Nordhval, Sikea, 300 bls. sulphite.

CASEIN

Kalbfleisch Corp., Southern Cross, Buenos Aires, 834 bags.

PHILADELPHIA IMPORTS

WEEK ENDING OCTOBER 3, 1925

L. H. Abenheimer, McKeesport, Dunkirk, 211 bls. rags.

J. Walworth Sons, McKeesport, Dunkirk, 52 bls. rags.

Standard Waste Manfg. Co., McKeesport, Dunkirk, 18 bls. rags.

I. M. Hagy Waste Works, McKeesport, Dunkirk, 116 bls. rags.

Salomon Bros. & Co., McKeesport, Dunkirk, 85 bls. rags.

S. Birkenstein Sons, McKeesport, Dunkirk, 633 bls. rags.

E. J. Keller Co., Inc., McKeesport, Dunkirk, 181 bls. rags.

Maurice O'Meara Co., McKeesport, Havre, 33 bls. rags.

G. M. Graves Co., McKeesport, Havre, 226 bls. rags.

Brown Bros. & Co., McKeesport, Havre, 116 bls. rags.

Salomon Bros. & Co., McKeesport, Havre, 147 bls. rags.

W. Whitaker, McKeesport, Havre, 28 bls. rags.

L. H. Abenheimer, McKeesport, Havre, 150 bls. rags.

E. J. Keller Co., Inc., McKeesport, Havre, 362 bls. rags.

S. Shapiro Sons, McKeesport, Havre, 171 bls. rags.

Equitable Trust Co., London Commerce, London, 297 bls. waste paper.

W. Schall & Co., London Commerce, London, 133 bls. rags.

Union National Bank, Capetown Maru, Hamburg, 532 bls. rags.

Baltimore Trust Co., Capetown Maru, Hamburg, 448 bls. rags.

Brown Bros. & Co., Capetown Maru, Hamburg, 18 bls. rags.

Castle & Overton, Inc., Capetown Maru, Hamburg, 114 bls. rags.

Philadelphia National Bank, Capetown Maru, Hamburg, 215 bls. rags.

Philadelphia National Bank, City of St. Joseph, Leghorn, 44 bls. rags.

S. Birkenstein Sons, City of St. Joseph, Leghorn, 69 bls. rags.

Katzenstein & Keene, Inc., City of St. Joseph, Leghorn, 56 bls. rags.

R. Blank, City of St. Joseph, Naples, 240 bls. rags.

E. J. Keller Co., Inc., Nobles, Genoa, 114 bls. thread waste.

Castle & Overton, Inc., West Arrow, Antwerp, 325 bls. rags.

Castle & Overton, Inc., Breedyk, Rotterdam, 85 bls. rags.

Castle & Overton, Inc., Novian, Antwerp, 189 bls. rags.

Castle & Overton, Inc., ———, Germany, 140 bls. wood pulp.

Stephano Bros., Inc., McKeesport, Havre, 2 cs. cigarette paper.

J. H. Weil & Co., Capetown Maru, Hamburg, 24 cs. packing paper.

NORFOLK IMPORTS

WEEK ENDING OCTOBER 3, 1925

Castle & Overton, Inc., Sac City, Rotterdam, 288 bls. wood pulp.

NEW ORLEANS IMPORTS

WEEK ENDING OCTOBER 3, 1925

Castle & Overton, Inc., Carplaka, Antwerp, 300 bls. rags.

Castle & Overton, Inc., Capt. Paul Lemerle, France, 157 bls. rags.

Castle & Overton, Inc., Effna, Rotterdam, 346 bls. rags.

Castle & Overton, Inc., Abercos, England, 219 bls. rags.

Castle & Overton, Inc., Gand, Antwerp, 312 bls. rags.

Castle & Overton, Ingram, Germany, 164 bls. rags.

E. J. Keller Co., Inc., Idam, Rotterdam, 51 bls. bagging.

BALTIMORE IMPORTS

WEEK ENDING OCTOBER 3, 1925

Star Co., Capetown Maru, Hamburg, 522 rolls news print.

Brown Bros. & Co., Capetown Maru, Hamburg, 106 bls. rags.

Ira L. Beebe & Co., Capetown Maru, Hamburg, 1300 bls. wood pulp, 260 tons.

W. Hartman & Co., Inc., Capetown Maru, Hamburg, 940 bls. wood pulp, 145 tons.

Pagel, Horton & Co., Inc., Nordhval, Domsjo, 2400 bls. sulphite pulp.

Pagel, Horton & Co., Inc., Nordhval, Husum, 300 bls. sulphite pulp.

Pagel, Horton & Co., Inc., Nordhval, Obbola, 10,500 bls. sulphate pulp.

Price & Pierce, Ltd., Nordhval, Ohrviken, 3450 bls. chemical pulp.

Equitable Trust Co., Nordhval, Sikea, 3000 bls. sulphite pulp.

Central Union Trust Co., Nordhval, Sikea, 1200 bls. sulphite pulp.

National City Bank, Nordhval, Soraker, 3500 bls. sulphite pulp.

Bulkley, Dunton & Co., Nordhval, Iggesund, 500 bls. kraft pulp.

Johanson, Wales & Sparre, Inc., Braheholm, Gothenburg, 2298 bls. kraft pulp.

Johanson, Wales & Sparre, Inc., Braheholm, Gothenburg, 375 bls. sulphite pulp.

E. J. Keller Co., Inc., Breedyk, Mannheim, 257 bls. wood pulp.

Castle & Overton, Inc., Sac City, Rotterdam, 152 bls. wood pulp.

BOSTON IMPORTS

WEEK ENDING OCTOBER 3, 1925

American Exchange National Bank, Castilian Prince, Buenos Aires, 417 bags casein.

First National Bank of Boston, Castilian Prince, Buenos Aires, 167 bags casein.

E. J. Keller Co., Inc., Blydencyk, Rotterdam, 189 bls. rags.

Castle & Overton, Inc., ———, Germany, 420 bls. wood pulp.

Kimberly Mill Ends Great Safety Record

[FROM OUR REGULAR CORRESPONDENT]

APPLETON, Wis., September 18, 1925.—An accident in which Theodore Wachtondonck, an employee of Kimberly mill, of the Kimberly-Clark Company, this week struck a platform with a truck which he was pushing, fell under the load and broke his ankle, ended a remarkable safety record achieved by that mill.

Up to this date, September 15, the mill had operated a total of 147 consecutive days without losing a minute on account of accidents. Figured on the basis of number of men employed, this gives the Kimberly mill a record of 131,567 "man-days" of safety, or a total of 1,052,536 man-hours.

The mill claimed to have beaten the world's record when on July 28 it passed the mark of its sister mill at Niagara, Wis., which operating 150 consecutive days without an accident established a record of 97,800 man-days of safety. The Kimberly mill's last lost-time accident previous to the one on September 15 occurred on March 14.

Paper Concerns Large Tax Payers in Holyoke

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, October 5, 1925.—The American Writing Paper Company is the second largest taxpayer in Holyoke this year, its 1925 taxes being $183,347. The Holyoke Water Power Company comes third with a tax of $125,478. Among the first 10 is also the Chemical Paper Manufacturing Company which is assessed $29,630 and the National Blank Book Company which is assessed $26,223.

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New York Market Review

Office of THE PAPER TRADE JOURNAL,
Wednesday, October 7, 1925.

Trading in the paper market continues to improve and the future prospects are exceptionally promising. The demand for the various grades, which has been steadily increasing since the beginning of September, shows no signs of abatement and the growing volume of inquiries being received by the manufacturers is most gratifying. Prices generally are well maintained on a firm basis. A continued expansion of business is confidently anticipated by the paper industry and last year's record should be left far behind. Sales organizations of the leading paper houses are in the midst of a strenuous and active seasonable campaign and all concerned express the greatest optimism regarding future business prospects.

The demand for news print continues to expand in a satisfactory manner. Leading newspapers of the country report rising circulations and increased advertising patronage. An enormous quantity of news print will undoubtedly be consumed from now on, until after the Yuletide holiday season. While the prices for spot business remain very firm it is expected that concessions will be made by the leading paper houses on contract business for the forthcoming year. One of the foremost organizations will probably announce in the near future, a reduction of $5 a ton from the prices prevailing throughout the current year. This concession does not indicate lower earnings for next year, but will be the result of a reduction in operating costs, cheaper power, ample water supply, and proximity to timber reserves, with consequent cutting of transportation costs. Incidentally, it is a fact that news print plants are operating at present well ahead of the rate a year ago.

Box board orders are heavier than for some time and many inquiries for future business are coming in. Fine papers are in greater demand, due to increased requirements from the printers. Coarse papers also share in the general improvement of the market and a good volume on sales are being transacted.

Mechanical Pulp

The ground wood market at present is in the midst of a strong demand for spot supplies. A steady buying movement on contract is also taking place. Prices are generally well maintained at the recently quoted basis. Mechanical pulp continues to move very freely into the consuming channels and future prospects are excellent.

Chemical Pulp

Chemical pulp continues to show great strength and higher prices are being quoted. A particularly strong demand is being experienced for kraft and bleached sulphate. Stocks are said to be gradually being depleted and, judging by the number of inquiries in the market, there is a possibility that accumulations may soon be practically absorbed. In addition to purchasing for immediate needs some consumers are purchasing at a considerable period ahead in anticipation of a rising market.

Old Rope and Bagging

Old rope and bagging is moving steadily and prices are holding firm. The mill demand continues to be for the same grades as formerly. In some cases, dealers are reported to have secured higher prices than formerly. Consuming demand is expected to improve from now on.

Rags

Very little change has taken place in the rag market. Domestic rags are in moderate demand, with prices generally holding to their former level. The foreign market is very quiet and imported rags are scarce, due to heavier European consumption.

Waste Paper

More inquiries are being received from the board mills for paper stock than for some time and the better types of waste paper are in greater demand. The lower grades, also, are slightly more active. Prices remain practically unchanged.

Twine

The revival in the twine market noticed since the advent of the autumn continues to hold up and prices are generally higher than recently quoted. The outlook for the immediate future is considered to be most promising.

Statement of the ownership, management, circulation, etc., required by the Act of Congress of August 24, 1912, of PAPER TRADE JOURNAL, published weekly at East Stroudsburg, Pa., for October 1, 1925.—State of New York, County of New York, ss.: Before me, a notary public in and for the State and County aforesaid, personally appeared Geo. S. Macdonald, who, having been duly sworn according to law, deposes and says that he is the publisher of the PAPER TRADE JOURNAL, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit: 1. That the names and addresses of the publisher, editor, managing editor, and business managers are:—Publisher, Geo. S. Macdonald, 10 E. 39th street, New York, N. Y. Editor, H. J. Berger, 10 East 39th street, New York, N. Y. Managing editor, H. J. Berger, 10 East 39th street, New York, N. Y. Business manager, Geo. S. Macdonald, 10 East 39th street, New York, N. Y. 2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.): The Lockwood Trade Journal Co., Inc., 10 East 39th street, New York, N. Y.; Stockholders: Leslie R. Palmer, 10 East 39th street, New York, N. Y.; J. D. Maley, Trustee of the Estate of Chas. H. Jones, Daytona, Fla.; J. D. Maley, Guardian for Elizabeth Jocelyn and Kathryn Maley, Daytona, Fla.; Mrs. M. G. Duck, Decatur, Ga.; Dorothy Martyn Freeman, Batcave, N. C. 3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are (if there are none, so state): None. 4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustees or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him. 5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is: (This information is required from daily publications only.)

GEO. S. MACDONALD, Signature of Publisher.

Sworn to and subscribed before me this 3rd day of October, 1925.

[SEAL.] MAX GROSS,
Notary Public, New York County.
(My commission expires March 30, 1926.)

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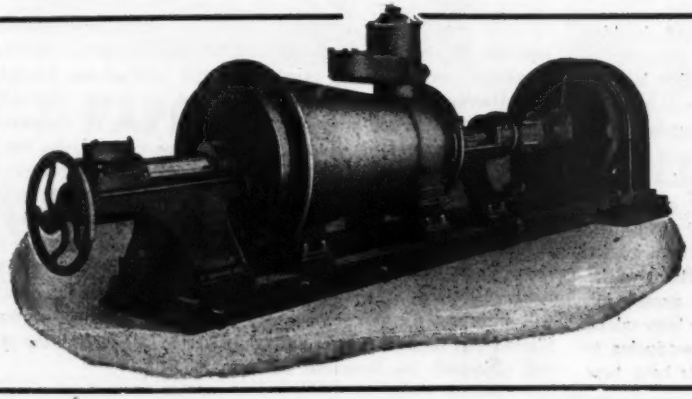

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Miscellaneous Markets

Office of THE PAPER TRADE JOURNAL,
Wednesday, October 7, 1925.

The steady improvement experienced in the chemical market since the beginning of September shows no signs of abatement. Spot demand has expanded and, at the time of writing, is better than it has been since last spring. Some manufacturers are said to be accepting contract business for next year under proper safeguards as to deliveries. The announcements of contract prices for the coming year, however, have not yet been made and in all probability the manufacturers will not be ready to publish their new rates until towards the end of the current month. The prevailing opinion seems to be that selling levels will show but little price fluctuations as compared to the basis now in existence. Good shipments are being received by manufacturers of chemicals and contract withdrawals are being well maintained at the present time.

BLANC FIXE.—The general tone of the blanc fixe market has improved and a satisfactory demand for supplies is being experienced. A good volume of inquiries for future business is being received and the outlook for the future is quite bright. Prices still rule at from $60 to $70 a ton for the pulp and from $80 to $100 a ton for the powder.

BLEACHING POWDER.—Trading in the bleaching powder market remains normal for this time of the year. Some little contract business has been transacted but consumers are not believed to have covered forward business to any extent. The demand is quite sufficient to prevent any accumulation of stocks. Prices continue steady and current values are expected to be maintained for some time. Bleaching powder is still quoted at from $1.90 to $2.30 per 100 pounds, in large drums, at works.

CAUSTIC SODA.—The demand for caustic soda continues active and leading manufacturers are running their plants at full capacity to take care of the requirements of their customers. Contract withdrawals have been very heavy and stocks on hand are extremely low. The market generally is quoting from $3.10 to $3.15 per 100 pounds, at works.

CASEIN.—Frequent inquiries are being received for casein and the demand is expanding steadily. Prices are more stoutly maintained than for some time, and the prevailing quotation rules at about 13 cents a pound.

CHINA CLAY.—Very little change has taken place in the china clay market. Trading continues on a firm basis and a good volume of business is being transacted. Prices remain steady and no changes are expected in the near future. Imported grades are quoted at from $16 to $20 a ton and the domestic grades at from $12 to $15 a ton.

CHLORINE.—The demand for chlorine continues along fairly active lines. Shipments have been very good and the general outlook is considered bright. Some contract business has been reported at around 4 cents per pound for shipment during the early part of next year. Prices remain firm at from 4 to 4½ cents per pound, in tanks, at works.

ROSIN.—The rosin market continues to fluctuate and the high level of prices prevailing has tended to make buyers conservative in their operations, but in spite of this fact, consumption has not fallen off to any degree. The naval stores are now quoting rosin at from $15.50 to $15.75, ship side, in barrels of 280 pounds.

SALT CAKE.—An active demand is being experienced for salt cake and numerous inquiries are being received. Supplies are being replenished by many buyers, as their stocks had greatly diminished. Manufacturers anticipate a great expansion of business when the new contract season gets into full swing. The price for salt cake continues firm at from $20 to $22 a ton, in bulk, at works.

SODA ASH.—Trading in the soda ash market has greatly improved and the leading manufacturers are all extremely busy taking care of the business that has developed. Plants are producing to full capacity due to the fact that contract withdrawals have been extremely heavy. The market is steady in tone and quoted prices rule firm at from 1.38 to 1.63 cents a pound in bulk, at works.

SULPHATE OF ALUMINA.—A steady routine has developed for sulphate of alumina. Spot trading has been more active and a fair amount of contract business has also been transacted. In bulk, at Eastern works, the quoted price for Commercial grades ranges from 1.40 to 1.50 cents a pound, while the iron free is selling at from 2 to 2.35 cents a pound.

SULPHUR.—The sulphur market continues active and a steady volume of inquiries is being received by the manufacturers. The demand for supplies is satisfactory and contract withdrawals are being taken out in a normal manner. No change has been announced in the price, which remains at from $19 to $20 a ton in bulk, ship side, and $15 to $16 a ton, at mine.

TALC.—The demand for talc is all that can be expected at this season. A fair number of inquiries are being received for future business. Prices are, as a rule, well maintained and little fluctuation is expected in the near future. Talc is still quoted at from $17 to $18 a ton, according to grade.

TRADE STATISTICS

(*Continued from page 60*)

tempt to reach "any agreement or any concerted action with respect to prices or production, or restricting competition." It is unfortunate that the right to meet and discuss such statistics was granted, for it is extremely difficult to avoid implied understandings, or gentlemen's agreements, or concerted action within the prohibitions of the anti-trust acts. Unless each meeting is attended by a lawyer, there will be constant understandings reached without a realization, possibly, that the law has been violated. While there is every reason to allow every business man to secure the fullest possible facts regarding his industry, it is quite a different thing to permit of an exchange of judgment on these facts within an organization. The line of demarcation between such action and the actual formation of very effective implied understandings, the existence of which is very difficult to prove, is very shadowy. A meeting at which matters of this kind are discussed and debated by leaders of the industry, can bring about a situation which, so far as actual results on competition are concerned, is practically the same as an agreement. It is very probable that many business organizations acting in reliance on this decision giving them the right to discuss such data, will, in fact, enter into understandings which violate the law. It cannot, therefore, be too strongly emphasized that these decisions, while recognizing the right of the business man to complete information, emphatically declare that the misuse of the information to effectuate contracts, agreements or understandings, or any concerted action through combinations which has the necessary tendency to destroy competition through price-fixing, restriction of production, or other similar results, is unlawful.

So far as the interchange of statistics is concerned, these decisions decide only that trade associations or other combinations of persons or corporations which openly and fairly gather and disseminate information as to the cost of their product, the volume of production, the actual price which the product has brought in past transactions, stocks of merchandise on hand, approximate cost of transportation from the principal point of shipment to points of consumption, and credit information, and who meet to discuss such statistics without reaching or attempting to reach any agreement or concerted action with respect to price or production, or restricting competition, do not violate the law. These decisions will become a landmark in the history of the anti-trust laws. They greatly clarify the law, but by reason of features already discussed there is grave danger that the business community will interpret them more broadly than their language warrants. Should this happen, the results would be unfortunate to the public and ultimately to American business.

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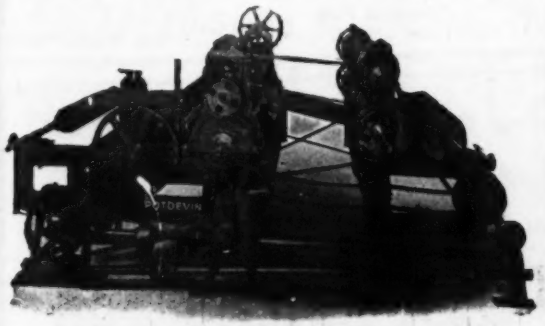

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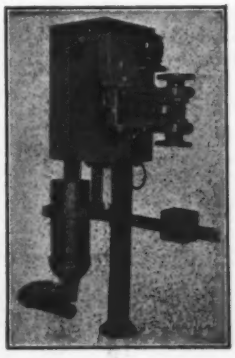

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Advance Bag and Paper, 7s 1943	98	100*
Bastrop Pulp and Paper, 7½s 1932	104	108*
Brompton Pulp and Paper, 6s 1927	94	96
Beaver Board, 8s 1933	92	94
Bedford Pulp and Paper, 6½s 1942	98	...
Berkshire Hills Paper Co., 8s 1941	...	80
Beaver Board, N. Y. Curb, 8s 1933	93	95
Beaver Products Corp., 7½s 1942	104	106
Belgo Canadian Paper, 6s 1943	100	101
Brown Paper Co., 8s 1931	102	...
Berlin Mills, 5s 1931	98	...
Bryant Paper Co., 6s 1942	99	102*
Brown Company Serial, 6s 1925-43	97	100
Central Paper 6½s 1925-42	91	94
Cape Breton Pulp and Paper, 6s 1932	100	...
Carthage Sulphite Pulp and Paper, 8s 1941	40	50
Champion Coated Paper Co., 6s 1924-34	...	102
Champion Fibre Co. Notes, 8s 1930	101	...
Cherry River Paper, 5s 1929	98	100*
Donnaconna Paper Co., Ltd., 6s 1940	99	101
Eddy Paper, 7½s 1931	97	...
Eagle Paper, 6½s 1932	96	100
Escanaba Paper, 6s 1933	87	95*
Fox River Paper, 7s 1931	100	...
Fort Orange Paper Co., 7s 1942	95	99
Eddy Paper Co., 7½s 1931	95	...
Gilbert Paper Co., 7s 1927	96	...
Gilbert Paper Co., 6½s 1923-29	101	102*
Hammermill Paper Co., 6s 1930-39	99	...
Hercules Corp'n, 8s 1936	100	...
Hummell, Ross Fibre Corp., 7s 1925	90	...
Jessup & Moore Paper Co., 6s 1939	97	...
Kenmore Pulp and Paper Co., 6s 1937	90	...
Lake Superior Pulp and Paper, 6s 1941	105	...
Mattagami Pulp and Paper, 6s 1937	90	...
Marinette & Menominee, 7½s 1936	104	...
National Paper and Type, 6s 1947	96	99*
Oswego Falls Corp., 8s 1942	102	105
Orono Pulp and Paper, 5s 1941	93	96*
Orono Pulp and Paper, 6s 1943	97	100*
Oxford Paper Co., 6s 1947	101	...
Paterson Parchment Paper, 5½s 1927-28	98	100
Paterson Parchment, 6s 1938	98	100*
Parker Young Co., 6½s 1944	92	96
Price Bros. & Co. Ltd., 6s 1943	100	102
Provincial Paper Mills, Ltd., 6s 1940	97	...
Riordon Co., Series A, 8s 1940	115	118
Riordan Paper, 6s 1924	99	101
Riordan Pulp and Paper, Ltd., 6s, 1929	33	35
River Raisin Paper, 8s 1936	104	106
St. Maurice Paper Co., Ltd., 5½s, 1929	98½	99¾
St. Regis Paper, 6½s, 1929-35	97	102
Smith (Howard) Paper Mills, 7s 1941	98	100
Smith (Howard) Paper Mills, 6s 1934	98	...
St. Croix Paper, 5s 1923-37	95	...
Stevens & Thomson Paper, 6s 1942	86	90
Spanish River Pulp and Paper, 6s 1931	105	108
Spanish River Pulp and Paper, Gen 8s 1941	106	109
Ticonderoga Pulp and Paper Co., 6s, 1940	91	95
Ticonderoga Pulp & Paper 1-5, 1930	88	93
S. D. Warren Company, 6s, 1945	97	100
Whittaker Paper, 1st 7s 1942	98	...
Watab Paper Co., 6½s 1942	100	104
Waterway Paper Products, 7s 1924-27	95	100
Wayagamack Pulp and Paper, Ltd., 6s 1951	88	90

STOCKS	BID	ASKED
Abitibi Power and Paper, Com	65	68
Abitibi Power and Paper, Pfd.	103	...
Advance Bag and Paper, Com	8	12*
Advance Bag and Paper, Pfd.	77	...
Beaver Board, Com.	4	6
Beaver Board, Pfd.	32	35
Bryant Paper, Cap.	12	...
Bryant Paper, Pfd.	9	...
Chicago Mill & Lumber Co., Com.	63	...
Chicago Mill & Lumber Co., Pfd.	98	104
Crown Williamette, Com.	93	98*
Crown Williamette, 7% A, Pfd.	98	SW
Donnaconna Paper, Com.	49	54
Donnaconna Paper, Pfd.	95	100
Great Northern Paper, Cap	260	270
Jessup & Moore Paper, Pfd.	80	85
International Paper Co., Com.	68	70
International Paper Co., Pfd. 6%	75	80
Mengel Company, Com.	60	70
Mengel Company, Pfd.	83	93
Oxford Papers, Com.	93	97
Oxford Paper Co., Pfd.	98	...
Provincial Paper Co., Com.	94	98
Provincial Paper Co., Pfd.	99	...
Price Brothers, Cap.	47	50
St. Croix Paper	185	215
St. Maurice Paper Co., Cap.	83	85
St. Regis Paper Co., Cap.	54	56
Spanish River Pulp and Paper, Com.	99	101
Spanish River Pulp and Paper, Pfd.	112	...
Ticonderoga Pulp and Paper, Cap.	145	...
West Virginia Pulp and Paper, Cap.	...	47
West Virginia Pulp and Paper, Pfd.	95	105
Whittaker Paper, Com.	40	50
Whittaker Paper, Pfd.	60	70

* Nominal.

Paper

(F. o. b. Mill)

Ledgers	11.00	@38.00
Bonds	9.00	@45.00
Writings—		
Extra Superfine	14.00	@32.00
Superfine	14.00	@32.00
Tub Sized	10.00	@15.00
Engine Sized	8.00	@11.00
News—		
Rolls, contract	3.50	@ 3.90
Rolls, transit	3.75	@ 4.25
Sheets	4.00	@ 4.25
Side Runs	3.25	@ 4.00
Book, Cased—		
S. & S. C.	7.00	@ 9.75
M. F.	6.25	@ 8.75
Coated and Enamel	8.00	@15.00
Lithograph	8.00	@15.00
Tissues—Per Ream		
White No. 1	.70	@ .90
Anti-Tarnish	1.10	@ 1.90
Colored	1.00	@ 2.00
White No. 2	.65	@ .75
Kraft	.85	@ .95
Manila	.70	@ .80
Kraft—		
No. 1 Domestic	5.75	@ 6.25
No. 2 Domestic	5.10	@ 5.50
Southern	4.75	@ 5.00
Imported	5.50	@ 5.75
Manila—		
No. 1 Jute	9.00	@ 9.25
No. 2 Jute	7.75	@ 8.50
No. 1 Wood	4.75	@ 5.25
No. 2 Wood	4.00	@ 4.50
Butchers	3.75	@ 4.25
Fibre Papers—		
No. 1 Fibre	4.50	@ 5.00
No. 2 Fibre	4.25	@ 4.75
Common Bogus	2.50	@ 2.75
S. Screening	3.00	@ 3.50
Card Middles	4.00	@ 5.00
Boards—per ton—		
News	45.00	@47.50
Straw	57.00	@60.00
Chip	42.00	@45.00
Binders' Boards	72.50	@77.50
Sgl. Mla. Lt. Chip.	58.00	@60.00
Wood Pulp	70.00	@75.00
Container	62.50	@67.50
Sulphate Screenings—		
Coarse	.75	@ .85
Refined	1.75	@ 2.00
Ground Wood—		
Screenings	20.00	@25.00
Glassine—		
Bleached, basis 25 lbs.	13.00	@16.00
Bleached, basis 20 lbs.	15.00	@16.00

Mechanical Pulp

(Ex-Dock)

No. 1 Imported (F. o. b. Mill)	33.00	@37.00
No. 1 Domestic	28.00	@32.00

Chemical Pulp

(Ex-Dock, Atlantic Ports)

Sulphite (Imported)—		
Bleached	4.00	@ 4.50
Easy Bleaching	3.25	@ 3.45
No. 1 strong unbleached	2.90	@ 3.25
No. 2 strong unbleached	2.65	@ 2.85
No. 1 Kraft	2.95	@ 3.20
Sulphate—		
Bleached (F. o. b. Pulp Mill)	3.75	@ 4.00
Sulphite (Domestic)—		
Bleached	3.85	@ 4.50
Easy Bleaching Sulphite	3.00	@ 3.25
News Sulphite	2.65	@ 2.80
Mitscherlich	3.25	@ 3.75
Kraft (Domestic)	3.00	@ 3.50
Soda Bleached	4.00	@ 4.25

Domestic Rags

New Rags

Prices to Mill f. o. b. N. Y.

Shirt Cuttings—		
New White, No. 1	14.25	@15.00
New White, No. 2	8.00	@10.00
Silesias No. 1	10.50	@11.50
New Unbleached	14.00	@15.00
Washables	6.50	@ 9.25
Fancy	9.75	@10.25
Blue Overall	11.50	@11.75
New Blue Prints	7.50	@ 8.50
New Soft Blacks	5.75	@ 6.20
Mixed Khaki Cuttings	7.00	@ 8.00
Pink Corset Cuttings	10.25	@10.75
Pink Muslin	10.00	@10.50
New Light Seconds	3.25	@ 3.50
O. D. Khaki Cuttings	7.00	@ 8.00
Men's Corduroy	6.25	@ 6.75
New Mixed Blacks	4.00	@ 4.50

Old Rags

White, No. 1—		
Repacked	6.50	@ 7.50
Miscellaneous	6.50	@ 7.00
White, No. 2—		
Repacked	4.00	@ 4.25
Miscellaneous	3.50	@ 3.75
St. Soiled, White	2.90	@ 3.00
Thirds and Blues—		
Repacked	3.75	@ 4.00
Miscellaneous	3.00	@ 3.25
Black Stockings	3.75	@ 4.25
Roofing Rags—		
Cloth Str ppings	2.35	@ 2.45
No. 1	2.35	@ 2.45
No. 2	2.40	@ 2.50
No. 3	2.10	@ 2.20
No. 4	2.00	@ 2.10
No. 5A	1.50	@ 1.75

Foreign Rags

New Light Silesias	10.50	@11.25
Light Flannelettes	10.50	@12.00
Unbleached Cottons	13.50	@15.00
New White Cuttings	13.50	@15.00
New Light Oxfords	10.50	@11.50
New Light Prints	9.00	@10.00
New Mixed Cuttings	4.25	@ 4.50
New Dark Cuttings	4.00	@ 4.50
No. 1 White Linens	10.00	@11.00
No. 2 White Linens	7.25	@ 8.25
No. 3 White Linens	6.25	@ 6.75
No. 4 White Linens	4.50	@ 5.50
Old Extra Light Prints	4.25	@ 4.75
Ord. Light Prints	3.25	@ 3.75
Med. Light Prints	2.50	@ 3.00
Dutch Blue Cottons	3.50	@ 4.00
Ger. Blue Cottons	3.00	@ 3.25
Ger. Blue Linens	4.25	@ 4.75
Checks and Blues	3.25	@ 3.50
Linsay Garments	2.40	@ 2.50
Dark Cottons	2.25	@ 2.35
Shoppery	2.20	@ 2.30
French Blues	3.75	@ 4.25

Bagging

Prices to Mill F. o. b. N. Y.

Gunny No. 1—		
Foreign	3.15	@ 3.25
Domestic	3.15	@ 3.25
Wool Tares, light	2.65	@ 2.75
Wool, Tares, heavy	2.70	@ 2.80
Bright, Bagging	2.55	@ 2.65
Mixed Bagging	2.30	@ 2.40
Sound Bagging	2.10	@ 2.20
Roofing Bagging	1.90	@ 2.00
Small Mixed Rope	2.00	@ 2.25
Manila Rope—		
Foreign	5.50	@ 6.00
Domestic	6.50	@ 7.00
New Bu. Cut	3.60	@ 3.85
Hessian Jute Threads—		
Foreign	4.00	@ 4.25
Domestic	3.25	@ 3.50

Old Waste Papers

(F. o. b. New York)

Shavings—		
Hard, White, No. 1	3.50	@ 3.70
Hard, White, No. 2	3.25	@ 3.50
Soft, White, No. 1	2.80	@ 2.90
Flat Stock—		
Stitchless	1.45	@ 1.55
Overissue Mag.	1.25	@ 1.40
Solid Flat Book	1.25	@ 1.40
Crumpled No. 1	1.25	@ 1.35
Solid Book Ledger	1.70	@ 1.80
Ledger Stock	1.40	@ 1.50
New B. B. Chips	.65	@ .75
Manilas—		
New Env. Cut	2.25	@ 2.40
New Cut. No. 1.	1.85	@ 2.25
Extra No. 1 old Print	1.40	@ 1.50
	1.20	@ 1.30
Container Board	.70	@ .90
Bogus Wrapper	1.00	@ 1.10
Old Krafts Machine compressed bales	2.00	@ 2.10
News—		
No. 1 White News	1.85	@ 2.00
Strictly Overissue	1.05	@ 1.15
Strictly Folded	.75	@ .85
No. 1 Mixed Paper	.65	@ .70
Common Paper	.50	@ .55

Twines

Cotton—(F. o. b. Mill)—		
No. 1	.42	@ .45
No. 2	.41	@ .43
No. 3	.40	@ .42
India, No. 6 basis—		
Light	.19	@ .20
Dark	.17	@ .19
B. C., 18 basis	.39	@ .41
A. B. Italian, 18 Basis	.36	@ .41

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TABER PUMPS

Fig. 510 illustrates Taber SL Double Suction Centrifugal Pump.

TABER PUMP COMPANY
BUFFALO, N. Y.

Finished Jute—			
Dark, 18 basis...	.30	@	.31
Light, 18 basis..	.28	@	.30
Jute Wrapping, 3-6 Ply—			
No. 1	.21	@	.23
No. 2	.21	@	.23
Tube Rope—			
4-ply and larger..	.15½	@	.17½
Fine Tube Yarn—			
4-ply and larger..	.20	@	.28
4-ply	.21	@	.24
3-ply	.22	@	.25

Unfinished India—			
Basis	.14½	@	.15½
Paper Makers' Twine			
Balls	.12	@	.13
Box Twine, 2-3 ply	.14	@	.15
Jute Rope	.20	@	.40
Ameri. Hemp, 6...	.30	@	.32
Sisal Hay Rope—			
No. 1 Basis	.14	@	.16
No. 2 Basis.....	.10	@	.12
Sisal Lath Yarn—			
No. 1	.14	@	.15
No. 2	.11	@	.13
Manila Rope	.18	@	.19

BOSTON

Paper

Ledgers—			
Sulphite	.08½	@	.18
Rag content	.18	@	.36½
All Rag	.38	@	.50
Bonds—			
Sulphite	.07½	@	.10½
Rag Content.....	.17	@	.45
All Rag	.36½	@	.51
Writings	.08	@	.20
Superfines	.22	@	.50
News	.04	@	.04½
Book, Super	.08	@	.10
Book, Coated	.09	@	.14
Coated Litho.....	.09½	@	.15
Label	.09½	@	.15
Jute Manila No. 1.	.11	@	.12
Manila, Sul. No. 1.	.05	@	.05
Manila, Sul. No. 2.	.03¾	@	.04¼
No. 1 Kraft.....	.05¾	@	.06½
No. 2 Kraft.....	.05¼	@	.05½
Common Bogus....	.02½	@	.02¾
Straw Board	—	@	50.00
News Board	—	@	50.00
Chip Board	—	@	47.50
Single Manila Pulp lined board 57.50		@	60.00
Single White, patent coated board 75.00		@	82.50
Wood Pulp Board..80.00		@	85.00
Binder Boards.....75.00		@	85.00
Tarred Felts—			
Regular 61.00		@	63.00
Slaters 66.00		@	68.00
Best Tarred, 1 Ply, roll	1.50	@	1.60
Best Tarred, 2 Ply, roll	1.70	@	1.80
Best Tarred, 3 Ply, roll	2.00	@	2.10

Old Papers

Shavings—			
No. 1 Hard White	3.75	@	4.00
White Blank News	1.75	@	2.00
Manila Env. Cuttings	2.80	@	3.00
No. 2 Hard White	3.25	@	3.50
No. 1 Soft White..	.02¾	@	.03
No. 2 Soft White..	.02½	@	.03
No. 1 Mixed.....	1.60	@	1.75
No. 2 Mixed.....	1.25	@	1.50
Solid Ledger Stock	2.00	@	1.75
No. 1 Books, Heavy	1.25	@	—
No. 1 Books, Light	—	@	1.25
No. 1 New Manila.	2.50	@	2.60
No. 1 Old Manila.	1.75	@	2.00
Print Manila	1.05	@	1.20
Old Kraft	2.25	@	—
Overissue News ...	1.00	@	—
Old Newspapers ...	.70	@	—
No. 1 Mixed Paper	.60	@	.47½
Box Board, Chip..	.60	@	.50

Bagging

Price f. o. b. Boston

Gunny No. 1—			
Foreign	—	@	3.00
Domestic	—	@	3.00
Manila Rope	6.00	@	6.50
Mixed Rope	2.00	@	—
Scrap burlaps ...	—	@	2.37½
Wool Tares, heavy.	2.50	@	2.75
Mixed Strings...	—	@	1.90
New Burlap Cutting	—	@	3.75

Domestic Rags (New)

Price f. o. b. Boston

Shirt Cuttings—			
New White No. 1	.15½	@	.15
Silesias, No. 1...	.11	@	—
New Unbleached.	.14¼	@	.15
Washable	.07¾	@	.08
Fancy	.10½	@	—
Cottons—According to Grades—Blue—			
Blue overalls.....	12¼	@	—
New Black, soft....	.07	@	—
Khaki Cuttings.....	.07	@	—
Corduroy	.04	@	.05
New Canvas	.12	@	.12½

Domestic Rags (Old)

Price f. o. b. Boston

White No. 1 .....10.00		@	—
Repacked	9.50	@	—
Miscellaneous	8.50	@	—
White No. 2—			
Repacked	6.50	@	—
Miscellaneous.....	5.25	@	—
Thirds and Blues—			
Repacked	5.00	@	—
Miscellaneous ...	3.50	@	—
Roofing Stock—			
No. 1	2.75	@	—
No. 2	2.50	@	—
No. 3	1.90	@	—
No. 4.....	2.00	@	—
Best Tarred, 3-ply..	2.10	@	2.15
No. 1 Mixed Paper	.65	@	.70
Common Paper....	.50	@	.60
Straw Board, Chip.	.60	@	.65
Binders Bd., Chip..	.60	@	.65

Domestic Rags—New

Price to Mill, f. o. b. Phila.

Shirt Cuttings—			
New White, No. 1	.13½	@	.14
New White, No. 2	.06	@	.08
Silesias, No. 1...	.10½	@	.11
New Unbleached.	.14	@	.14½
Washable	.07¼	@	.07¾
Fancy	.09½	@	.10
Cottons—according to grades—			
Blue Overall	.11	@	.12
New Blue.....	.04	@	.04¼
New Black Soft..	.06	@	.06¼
New Light Seconds	.03½	@	.03¾
Khaki Cuttings..	.06½	@	.07
Corduroy	.04	@	.04½
Old Newspaper....	.70	@	.75
New Canvas	.08¾	@	.09
New Black Mixed	.05	@	.05½
Old White, No. 1—			
Repacked	6.75	@	7.00
Miscellaneous ...	6.25	@	6.50
White, No. 2—			
Repacked	.05	@	.05¼
Miscellaneous ...	.04¾	@	.05
Thirds and Blues—			
Repacked	3.75	@	4.00
Miscellaneous ...	3.15	@	3.25
Black Stockings.	4.25	@	4.50
Roofing Stock—			
No. 1	2.00	@	2.15
No. 2	1.90	@	2.00
No. 3	1.25	@	1.35
No. 4	1.10	@	1.20
No. 5A	1.10	@	1.15
B	1.05	@	1.10
C	1.00	@	1.05

PHILADELPHIA

Paper

Bonds	.07	@	.40
Ledgers	.11	@	.40
Writings—			
Superfine	.13	@	.18
Extra fine	—	@	.22
Fine	.20	@	.26½
Fine, No. 2.....	.16	@	.25
Fine, No. 3.....	.12	@	.20
Book, M. F.....	.06¾	@	.07
Book, S. S. & C...	.06	@	.07½
Book, Coated	.11	@	.16
Coated Lithograph.	.09	@	.12
Label	.09	@	.12
News	.03¾	@	.04
No. 1 Jute Manila.	.09½	@	—
Manila Sul., No. 1	.04½	@	.06
Manila No. 2.....	.04	@	.04½
No. 2 Kraft.....	.05¼	@	.05¾
No. 1 Kraft.....	.06¼	@	.06½
Common Bogus	.02¾	@	—
Straw Board 56.00		@	55.00
News Board 47.50			
Chip Board 50.00			
Wood Pulp Board. 4.50 (Carload Lots)		@	5.00
Binder Boards—			
Per ton 75.00		@	80.00
Carload lots 65.00		@	70.00
Tarred Felts—			
Regular 66.00		&68.00	
Slaters 70.00		@	72.00
Best Tarred, 1-ply (per roll)	1.85	@	1.95
Best Tarred, 2-ply (per roll)	1.55	@	1.70

Bagging

F. o. b. Phila.

Gunny, No. 1—			
Foreign	3.00	@	3.25
Domestic	3.00	@	3.25
Manila Rope	4.75	@	6.00
Sisal Rope	2.50	@	—
Mixed Rope	1.00	@	1.25
Scrap Burlaps...	2.25	@	2.50
Wool Tares, heavy.	2.00	@	2.13
Mixed Strings...	1.25	@	—
No. 1, New Lt. Burlap	3.50	@	3.75
New Burlap Cuttings	3.25	@	3.50

Old Papers

F. o. b. Phila.

Shavings—			
No. 1 Hard White	3.50	@	3.60
No. 2 Hard White	3.00	@	3.25
No. 1 Soft White	2.60	@	2.70
No. 2 Soft White	2.00	@	2.20
No. 1 Mixed....	1.50	@	1.60
No. 2 Mixed....	1.00	@	1.10
Solid Ledger Stock.	1.75	@	1.90
Writing Paper	1.60	@	1.65
No. 1 Books, heavy	1.30	@	1.40
No. 2 Books, light.	1.20	@	1.25
No. 1 New Manila.	1.80	@	2.00
No. 1 Old Manila..	1.60	@	1.75
Print Manila.....	1.25	@	1.35
Container Manila..	1.00	@	1.10
Old Kraft	2.00	@	2.10
Over issue News...	.85	@	1.00

TORONTO

Paper

(Mill Prices to Jobbers f. o. b. Mill)

Bond—			
Sulphite	.10½	@	.12½
Light tinted	.11	@	.13½
Dark tinted	.12½	@	.15
Ledgers (sulphite).	—	@	.13
Ledgers No. 1.....	.36	@	—
Ledgers No. 2.....	.27	@	—
Writing	.09½	@	
Writing S. C.....	.10	@	
News f. o. b. Mills—			
Rolls (carloads)..	3.50	@	—
Sheets (carloads)..	—	@	4.25
Sheets (2 tons or over)	—	@	4.60
Book—			
No. 1 M. F. (carloads)	8.00	@	—
No. 2 M. F. (carloads)	7.50	@	—
No. 3 M. F. (carloads)	7.00	@	—
No. 1 S. C. (carloads)	8.50	@	—
No. 2 S. C. (carloads)	8.00	@	—
No. 3 S. C. (carloads)	7.50	@	—
No. 1 Coated and litho 14.50		@	—
No. 2 Coated and litho 13.50		@	—
No. 3 Coated and litho 12.75		@	—
Coated tinted	.15	@	—
Wrapping—			
Rag Brown	4.75	@	—
White Rag	5.25	@	—
"B" Manila	5.50	@	—
No. 1 Manila ...	6.50	@	—
Fiber	6.50	@	—
Kraft, M. F.....	7.00	@	—
M. G.	7.15	@	—

Pulp

(F. o. b. Mill)

Ground wood 27.00		@	33.00
Sulphite easy bleaching 60.00		@	65.00
Sulphite news grade	56.00	@	60.00
Sulphite, bleached	78.00	@	90.00
Sulphate 67.50		@	70.00

Old Waste Paper

(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. cut..3.65		@	—
Soft White Book shavings	—	@	3.15
White Blk, News	1.70	@	—
Book and Ledger—			
Flat Magazine and Book Stock (old)	1.25	@	—
Light and Crumpled Book Stock	1.10	@	—
Ledgers and Writings	1.40	@	—
Solid Ledgers ...	1.40	@	—
Manilas—			
New Manila Cut.	—	@	1.60
Printed Manilas..	1.10	@	—
Kraft	2.25	@	—
News and Scrap—			
Strictly Overissue	.90	@	—
Folded News ...	.90	@	—
No. 1 Mixed Papers	.70	@	—

Domestic Rags—
Price to mills, f. o. b. Toronto
Per lb.

No. 1 White shirt cuttings	.14½	@	.14¼
No. 2 White shirt cuttings	.08	@	.08½
Fancy shirt cuttings	.09¾	@	.10
No. 1 Old Whites..	—	@	—
Third and blues...	—		—

Bids and Awards for Government Paper

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., October 7, 1925.—The Government Printing Office has received the following bids for 3,000 sheets Brown Cloth-Lined Cover Paper, 24 x 36-108: Dobler & Mudge, $192.50 per thousand; Lindenmeyr & Harker $72.00; Maurice O'Meara Company, $110.00; Barton, Duer & Koch Paper Company, $199.00; R. P. Andrews Paper Company, $148.00; Mathers-Lamm Paper Company, $192.50; Whitaker Paper Company, $196.00; and Carter, Rice & Co., Corporation, $192.50.

The Government Printing Office has received the following bids for 13,275 lbs. Rope Manila Paper, 26 x 42-177. R. P. Andrews Paper Company, 17.7 cents per lb; Virginia Paper Company, 17.98 cents; Old Dominion Paper Company, 14.74 cents; R. A. Cauthorne Paper Company, 18 cents; American Writing Paper Company, 9.75 cents; and Carter, Rice & oC., Corporation, 17.96 cents.

The Samuel S. Alcorn Company has been awarded the contract by the Bureau of Supplies and Accounts, Navy Department, for furnishing the Brooklyn Navy Yard with 6,000 reams of 16 x 21-18 white printing paper at $14,580, bids for which were opened on September 1.